DOCUMENT RESUME

ED 384 780 CE 069 467

TITLE	Skills Today for Tomorrow: Advancing a Workplace Literacy Consortium for the Printing Industry. May 1993-April 1995 Final Report.
INSTITUTION	Catonsville Community Coll., Md.
SPONS AGENCY	Office of Vocational and Adult Education (ED), Washington, DC. National Workplace Literacy Program.
PUB DATE	Apr 95
CONTRACT	V198A30146-93A
NOTE	270p.; For related documents, see ED 355 367-368 and CE 069 468.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC11 Plus Postage.
DESCRIPTORS	Adult Basic Education; *Adult Literacy; Basic Skills; Curriculum; *Literacy Education; On the Job Training; Participant Satisfaction; *Printing; Program Effectiveness; Program Evaluation; *Program Implementation; Skill Development
IDENTIFIERS	*Workplace Literacy

ABSTRACT

A 2-year project was conducted to improve the productivity of the work force through improvement of literacy skills in the workplace by providing instruction to employees in the printing industry in the Baltimore (Maryland) metropolitan area; Carroll County and Charles County, Maryland; and York, Pennsylvania. The project was organized with input from the six companies whose workers participated. The curriculum, which had been designed during a previous grant period, was updated, and recruiting materials were developed. Potential students were assessed using standardized tests, and workers who were interested were placed into the program on one of three levels according to their needs. Instruction was provided with a great deal of flexibility to meet the needs of as many workers as possible. Workers who participated in the program reported that they read and write more and use mathematics better. Evaluation of the project was positive. However, constant staff changes, both in the project and in the companies, made the project more difficult to implement. (Project materials, including a sample of the curriculum and a third-party evaluation, are included in the report.) (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 384 780

SKILLS TODAY FOR TOMORROW:

ADVANCING A WORKPLACE LITERACY CONSORTIUM FOR THE PRINTING INDUSTRY

MAY 1993 - APRIL 1995 FINAL REPORT

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

prepared by:
CATONSVILLE COMMUNITY COLLEGE
800 SOUTH ROLLING ROAD
BALTIMORE, MARYLAND 21228
(410) 455-4501

LAURA E. WEIDNER, PROJECT DIRECTOR

CE 069 467

BEST COPY AVAILABLE

TABLE OF CONTENTS

I. Program Highlights
Abstract. 1

II. Implementation
Introduction. 2
Start-up. 4
Partner Roles 6
Staffing. 7
Initial Implementation Steps. 10
Marketing the Program 13
Employee Recruitment. 15

III. Program Structure
Assessment. 17
Instruction 22
Literacy Task Analyses. 25
Curriculum. 26
Participant Recognition 29

IV. Outcomes
Objectives and Outcomes 30
Enrollments by Company. 31
Data Comparisons/Follow-Ups 33

V. Evaluation
Evaluation. 41
Course Evaluation Summary Charts. 42
Supervisor Outcomes Survey. 56
Supervisor Survey Summary Charts. 57

VI. Dissemination
Dissemination Results 64

VII. Site Summary Pages
Automated Graphics Systems. 66
McGregor Printing Corporation 67
Advantage Bookbinding 68
Catterton Printing 69
Dick Wildes Printing 70
Garamond/Pridemark Press. 71
Oles Envelope Corporation 72
Oscar T. Smith Company. 73
York Graphic Services 74
Direct Marketing Associates 75
Landmark Community Newspapers 76

VIII. Recommendations
Recommendations 77

IX. Exhibits

ABSTRACT

1. PROGRAM TITLE: NATIONAL WORKPLACE LITERACY PROGRAM (CFDA 84.198A)

2. PROJECT TITLE: SKILLS TODAY FOR TOMORROW: IMPLEMENTING WORKPLACE LITERACY CONSORTIUM FOR THE PRINTING INDUSTRY

3. AWARD NUMBER: V198A30146-93A

4. PROJECT DIRECTOR: LAURA E. WEIDNER
(410)455-4501

5. FUNDS:

FEDERAL:	$323,809.33
NON-FEDERAL:	$300,283.00
TOTAL FUNDS:	$624,092.33
FEDERAL FUNDS:	52% OF TOTAL FUNDS

6. AWARD PERIOD: 5/1/93 - 4/30/95

7. FEDERAL OFFICERS: MELISSA MORRILL, PROGRAM OFFICER
JULIUS C. COTTON, GRANTS OFFICER

8. PARTNERS:
CATONSVILLE COMMUNITY COLLEGE
PRINTING INDUSTRIES OF MARYLAND
CARROLL COMMUNITY COLLEGE
CHARLES COUNTY COMMUNITY COLLEGE
HARRISBURG AREA COMMUNITY COLLEGE
YORK GRAPHIC SERVICES
SHERIDAN PRESS
GARAMOND PRIDEMARK PRESS
OSCAR T. SMITH PRINTING COMPANY
DICK WILDES PRINTING
AUTOMATED GRAPHIC SERVICES
MCGREGOR PRINTING

9. PURPOSE: THE PURPOSE OF THIS PROJECT IS TO IMPROVE THE PRODUCTIVITY OF THE WORKFORCE THROUGH IMPROVEMENT OF LITERACY SKILLS IN THE WORKPLACE BY PROVIDING INSTRUCTION TO EMPLOYEES IN THE PRINTING INDUSTRY IN THE BALTIMORE METROPOLITAN AREA, CARROLL COUNTY, CHARLES COUNTY, AND YORK, PENNSYLVANIA.

INTRODUCTION

Catonsville Community College (CCC) and Printing Industries of Maryland have enjoyed a long-standing mutually beneficial relationship for over 17 years. PIM and CCC worked together to develop a grant resulting in the establishment of CCC's two year degree program in Printing Management Technology, as well as a certificate program in printing. The relationship between PIM and CCC is currently stronger than ever. Together, the association and the college have formed the printing curriculum for the JTPA program, acquired equipment to be used in college printing and upgrade training programs, and developed hands-on training for representatives in the industry.

In early 1990, the PIM Education Committee approached CCC about a growing concern in the industry relating to the basic skills levels of employees. Several local companies had expressed some degree of alarm at their employees' inability to perform tasks requiring basic reading and/or math skills. This local concern was validated further by a study conducted by the National Association of Printers and Lithographers (NAPL) in 1990. This survey reported the lack of adequate basic skills to meet basic job requirements in:

41% of bindery workers
38% of press workers
30% of materials handling workers
28% of pre-press workers

Catonsville and PIM conducted a local survey which indicated similar levels of skill deficiencies among workers in the Baltimore Metropolitan area. As a result, PIM asked Catonsville to develop a program to meet those needs.

In 1991, using these surveys as evidence of need, CCC & PIM were awarded a $240,500 grant by the U.S. Department of Education under the National Workplace Literacy Grant program. With these funds, CCC and PIM created and implemented a workplace literacy program for eight printing companies in the Baltimore metropolitan area. ***Skills Today for Tomorrow***, as this program is called, was tremendously successful in providing instruction in basic reading, writing, math, critical thinking, problem solving, and communications skills to area workers, and received both local and national recognition for the quality of the program.

Due to the success of this program, and in order to expand and replicate ***Skills Today for Tomorrow*** regionally, CCC was awarded a second grant of $385,161 in 1993. This project tested the replicability of the ***Skills Today for Tomorrow*** model of workplace literacy skills

training through the involvement of three regional community colleges: Carroll Community College, Charles County Community College, and Harrisburg Area Community College, with the goal of implementing it elsewhere in Maryland or the United States at a relatively low cost.

This document reports the process, outcomes, and recommendations of this second grant for ***Skills Today for Tomorrow***.

START-UP

Catonsville Community College began preparations for the start-up of this 1993 project several months prior to the May 1993 funding date. The college was able to do this because the project director from the first grant was employed by the college during the interim between the grants to do other projects. Initial steps were taken to begin hiring project staff, coordinating with partner colleges, and re-opening negotiations with the business partners.

The Education Committee of PIM served as the Management Council for the project. This committee is comprised of the Vice President of PIM, ten printing owners and managers who serve as representatives of the more than 400 PIM members, and a representative from the Continuing Education Division of Catonsville Community College. In addition, the ***Skills Today for Tomorrow*** Project Director attended Education Committee meetings.

The Management Council played a very important role in the project. The Project Director constantly sought input and recommendations from this Council. Because the Education Committee members represent different components of the graphic arts industry (small, medium, and large firms, paper suppliers, ink suppliers, pre-press firms, composition firms, and binderies, among others), they were able to offer excellent suggestions for addressing many of the questions encountered in the project. In addition, since the project staff holds primarily an education background and focus, the business acumen of the Management Council was invaluable.

Six companies had agreed to participate in ***Skills Today for Tomorrow***:

Dick Wildes Printing
McGregor Business Forms
Sheridan Press
York Graphic Services
O. T. Smith Printing Company
Garamond-Pridemark Press

Sheridan Press, the largest partner, withdrew from the partnership due to complete change in management. The new management team, burdened with changing financial circumstances, was not able to support the project. A number of other companies had approached PIM and Catonsville Community College requesting the opportunity to participate in ***Skills Today for Tomorrow***. As the project progressed and it became clear

that at least one major partner had withdrawn, the project was able to offer classes at the following companies as sites in the project:

Advantage Book Binding
Catterton Press
Landmark Printing
Oles Envelope Co.
Direct Marketing Associates

A summary chart of the roles of each of the partners in ***Skills Today for Tomorrow*** follows.

PARTNER RESPONSIBILITIES

RESPECTIVE ROLES OF THE PARTNERS:	CATONSVILLE COMMUNITY COLLEGE	PIM+SP	PARTICIPATIN COMPANIES	OTHER PARTNER COLLEGES
ACTIVITY A				
PLAN/ADMINISTER PROJECT				
PROVIDE INSTRUCTION				
CONDUCT ASSESSMENTS				
DEVELOP/ADAPT CURRICULUM				
SCHEDULE CLASSES				
PROVIDE COURSE MATERIALS				
HIRE PROJECT STAFF				
MANAGE BUDGET				
PROVIDE ADVISING/ACADEMIC SUPPPORT SERVICES				
EVALUATE PROJECT				
PLAN/PRODUCE PROMOTIONAL VIDEO				
AID IN PARTICIPANT SELECTION				
PROVIDE ON-SITE SUPPORT				
PROVIDE INSTRUCTIONAL SPACE				
PROVIDE SUPPORT SERVICES				
PROVIDE EQUIPMENT, STORAGE, ETC.				
CONDUCT RECRUITMENT/MARKETING				
MARKET VIDEO				
SERVE AS LIAISON BETWEEN PARTNERS				
ACTIVITY B				
PLAN/ADMINISTER PROJECT				
APPROVE SELECTION OF INSTRUCTORS				
PROVIDE CURRICULUM MATERIALS				
MANAGE BUDGET				
INSURE INSTRUCTIONAL QUALITY				
PROVIDE STAFF DEVELOPMENT FOR PARTNER COLLEG				
EVALUATE PROJECT				
OVERSEE DAY-TO-DAY OPERATION OF PROJECT				
SELECT INSTRUCTIONAL STAFF				
PROVIDE ADVISING/ACADEMIC SUPPPORT SERVICES				
CONDUCT ASSESSMENTS				
PREPARE REPORTS - QUARTERLY, BUDGET, DATA				
PROVIDE INSTRUCTION				
SERVE AS LIAISON BETWEEN PARTNERS				
AID IN PARTICIPANT SELECTION				
PROVIDE ON-SITE SUPPORT				
PROVIDE INSTRUCTIONAL SPACE				
PROVIDE SUPPORT SERVICES				
PROVIDE EQUIPMENT, STORAGE, ETC.				
CONDUCT RECRUITMENT/MARKETING				

BEST COPY AVAILABLE

STAFFING

Staffing under the original proposal consisted of the following:

Project Director	100%
Curriculum/Assessment Coordinator	100%
Educational Counselor	80%
PIM Liaison	25%
CCC Administrator	10%
Project Secretary	100%
Program Coordinators (colleges)	25%
Site Coordinators (companies)	10%

Instructors were hired on an adjunct, as needed, basis to reduce instructional costs, to maximize time and schedule flexibility, and to enable CCC to serve multiple sites at one time.

The staffing of the ***Skills Today for Tomorrow*** project was planned to meet the varied and diverse needs of an undertaking of this size. In addition to the Project Director, who was responsible for the overall management of the program, a Curriculum/Assessment Coordinator was hired in order to supervise the instructors, review course proposals, coordinate assessment reports, as well as approve and evaluate instructional materials. To provide 1-1 counseling for participants with regard to their educational goals, objectives, and plans, and provide assistance to instructors as they develop individual learning plans for students, an Educational Counselor was added to the team. At each partner college, a Program Coordinator was designated to schedule assessments and classes, market the program, select instructional staff, and oversee the day-to-day operations of the project within the partner college's service area. Finally, each participating company was to appoint a Site Coordinator to schedule and announce meetings, assessments, training facilities, and equipment.

All staff members were carefully evaluated to determine their qualifications, experience, and capabilities. Flexibility and commitment to working with adults were two of the primary qualities required of all staff members.

Staffing challenges began when both the Curriculum/Assessment Coordinator and the

Educational Counselor originally proposed were unable to assume the duties of the positions, necessitating an outside search for qualified individuals. A search was conducted and a Curriculum/Assessment Coordinator was hired. After a series of initial planning and implementation meetings with the partner colleges, the decision was made to hire the Educational Counselor on an adjunct basis. Again this was to maximize the project dollars and flexibility. Since project sites were in four Maryland counties and in Southern Pennsylvania, travel time and money for a single counselor would have substantial. Adjuncts could be hired at each location, saving those resources, and providing an additional benefit of local expertise and knowledge of potential resources for students. Two-thirds of the way through the project, the Curriculum/Assessment Coordinator resigned to take a permanent position elsewhere, necessitating replacement with contractual staff. Due to the proximity of the conclusion of the program (less than six months), replacement with full time staff would have been impossible. In addition, there were numerous staffing changes of the Program Coordinators at the partner community colleges, disrupting the continuity of the program, and diminishing further the commitment of the partners. Similar changes of key contacts at participating companies produced diminished commitment to the project at the work-sites. These issues, while potentially a problem in any project of this nature, were particularly difficult in a project of this geographic diversity.

SKILLS TODAY FOR TOMORROW - PROJECT STAFF

Project Director	Laura E. Weidner
Curriculum/Assessment Coordinator	Ruth Markulis Linda A. Metz*
Educational Counselors	Diane Johnston Sara Waldron Pete White
PIM Liaison	Patricia Martin
Project Assistant/Secretary	Mary Claire Monroe Brett Cloyd*

Program Coordinators

Harrisburg Area Community College	Larry Gingrich Linda McKeever** Rachel Gibbs**
Carroll Community College	Ellen Willis Elaine Smith** KathleenMenasche**
Charles County Community College	Louise Buchanan Arlene Taylor**

Adjunct Instructors

Catonsville Community College	Linda A. Metz Constance C. Smith Daryl L. Reaney Donna Dziuban Joan L. Feeney LeRoy Jones
Harrisburg Area Community Colleges	George Mierisch Ruth Rothingshofer Tom Diffenbach Victor Solenski
Carroll County Community College	Mary Jo Winter
Charles County Community	James Cecil Barbara Allen

* Contractual replacements
** Replacements

INITIAL IMPLEMENTATION STEPS

Since this project was the second NWLP Catonsville Community College was implementing, the program model had already been developed. Project staff began working immediately with the partner colleges to train their program coordinators. Some difficulty was met here as the project responsibilities at two of the partner colleges were handed to different individuals than had been originally identified for the project. This meant more training and orientation sessions to prepare the partner colleges.

The Project Director met several times with the "contact person" at each company prior to meeting with the management. Meetings with top management were essential prior to the employee recruitment phase. A series of handouts was shared with company management at these meetings. **(SEE EXHIBIT A)** At these upper-level management meetings the following issues were discussed:

-Need for basic skills instruction in industry in general and in this firm in particular.

-Commitment of CEO and other top management to offering ***Skills Today for Tomorrow*** to company employees.

-Role of CCC staff and program: important, yet secondary to primary function of the company, i.e. getting the job done.

-Advantages of voluntary participation by employees.

-Necessity of confidentiality of all employee records.

-Release-time configurations for classes:
- -100% company time
- -100% employee time
- -50% company time/50% employee time (strongly encouraged)

-Process/progress of the project:
- -Interest generating sessions
- -Literacy Task Analyses
- -Curriculum development (on-going)
- -Employee needs assessments
- -Instruction

-Cost to the company:
- -Site Coordinator
- -Release-time
- -Instructional space
- -Miscellaneous supplies

-Record-keeping requirements

Once these issues were resolved with management, the Project Director met with front-line supervisors. This step was critical to the successful implementation and continuation of ***Skills Today for Tomorrow*** at each company and its importance must be emphasized. At supervisor meetings the following issues were discussed:

-Need for basic skills instruction in industry in general and in this firm in particular.

-Commitment of CEO and other top management to offering ***Skills Today for Tomorrow***.

-Role of CCC and partner college staff and program: important, yet secondary to primary function of the company, i.e. getting the job done.

-Process/progress of the project:
- -Interest generating sessions
- -Literacy Task Analyses
- -Curriculum development (on-going)
- -Employee needs assessments
- -Instruction

-Necessity for on-going communication between supervisor, site coordinator, and Project Director.

-Confidentiality

-Role of the supervisor in recruitment:
  -Encouraging employees to get involved
  -Arranging schedules to accommodate participants
  -Positive attitude & actions toward program

-Specific needs within each department--supervisors were asked to help identify basic skill areas that needed to be addressed.

-Identification of two or three competent workers within each department to participate in the Literacy Task Analyses.

Most supervisors, as far as CCC was able to ascertain, were supportive of the project. They were willing to release employees to attend class, as long as accurate attendance records were kept. Their concerns centered around schedule changes needed when workers were in class during work hours. The Project Director met this concern with assurances that the job was the primary concern, and ***Skills Today for Tomorrow*** staff would be flexible and adjust for contingencies such as rush jobs, short-handed days, and the like.

Another common thread was a concern that employees whom the supervisor "knew" really needed the program would not voluntarily become involved. Lengthy discussion centered on this topic, but the advantages of voluntary participation outweighed the desire to involve reluctant or unwilling individuals. Based on previous experience, project staff believed that word-of-mouth promotion after the first round of classes would encourage workers who were reluctant at the beginning.

MARKETING THE PROGRAM

The goal of this plan was to encourage other PIM member companies to participate in ***Skills Today for Tomorrow,*** enabling the project to meet its training goals. The Project Director designed a set of handouts to share with company management when discussing the project, used posters, brochures, and other materials to use in both marketing and recruitment. **(See Exhibit B)**

In addition, a marketing video, featuring actual students, instructors, and management from participating firms in the ***Skills Today for Tomorrow*** project, was created and used as a recruiting tool for promoting the program within printing companies. This video highlights the industry need for basic skills training, with the primary goal of obtaining management buy-in and employee recruitment.

The PIM Vice President made initial contact with member companies that had expressed an interest in becoming involved. She personally contacted members that might be interested. It was especially effective for the initial contact to come from the professional trade association rather than the college. In addition, she published articles in the PIM members' newsletter encouraging inquiries.

As reports of ***Skills Today for Tomorrow*** spread throughout PIM membership, more and more companies requested the opportunity to become involved. Thus, the expansion of the project to Southern Pennsylvania (York Graphic Services), Southern Maryland (Automated Graphics and Dick Wildes Press), and Western Maryland (McGregor Printing), enabled CCC and PIM to plant the seeds of the project at strategic points throughout the state and region.

Once the initial contact had been made, the Project Director scheduled meetings with representatives at interested companies, making the "pitch" to get involved. Some of the difficulties encountered in this process included:

-Most printing companies are small, less than 25 employees, making the logistics of on-site instruction difficult and not cost-effective.

-Some of the companies were union-represented, and others were not. Non-union companies were reluctant for their employees to share classes with union-represented workers.

-In small companies of 25 or fewer employees, employers were very concerned about releasing 8-10 workers for classes. There would be a far greater impact on the production line than in a larger company.

The Project Director approached the following companies to become involved as sites in ***Skills Today for Tomorrow***. Those marked with an asterisk participated in the program.

* Advantage Bookbinding

* Catterton Printing

* Direct Marketing Associates

* Landmark Printing

Lawson-Marden Labels

* Oles Envelope Corp.

Sullivan Graphics

EMPLOYEE RECRUITMENT

An integral part of the Project Director's assignment was employee recruitment. Since every company participating in ***Skills Today for Tomorrow*** had agreed to a completely voluntary program, an effective campaign to encourage worker involvement was critical. The distant sites of this project made it necessary to train other project staff to conduct employee recruitment sessions. The project director could no longer conduct all of the sessions. This process was done through a combination of direct instruction and on-the-job observations and training for the Curriculum/Assessment Coordinator and the Program Coordinator at each college.

The company scheduled employee meetings for the purpose of generating interest in the program among workers. CCC insisted that meetings be made available to all employees. Wherever possible, employee attendance at these interest-generating meetings was mandatory. The Project Director requested a minimum of 20 minutes and a maximum of 30 for each meeting. The company determined meeting times, locations, and number of workers in attendance.

These meetings took different forms at each company. In some instances, the Project Director spoke to employees as part of a regularly scheduled department or plant meeting. Other times, employees were scheduled in small groups for special meetings usually held in the company cafeteria. At one site, the plant manager simply shut down the loudest presses and employees gathered round an empty pallet while the Project Director spoke above the hum of other machinery.

Despite management's consistent predictions of low response, these meetings were extremely successful in recruiting employees for the program. Several factors contributed to the very positive response by employees at these meetings:

-Project Director approached employees on a very personal level.

-Tone of these meetings was low pressure and low key.

-Management, usually the CEO, introduced the Project Director and expressed strong support for ***Skills Today for Tomorrow***.

-Educational goals that extended to the personal level were addressed.

-Differences between ***Skills Today for Tomorrow*** and the K-12 school experience were stressed.

-Individualized instruction, based on goals and needs of each participant, was highlighted as hallmark of the program.

-CCC presented this as an opportunity, one not likely to recur in the near future.

-An outside provider has an advantage of not being part of the company, its culture, and its politics. The Project Director remained neutral on those issues, helping to gain the workers' trust.

-Employees were more willing to enroll in classes conducted by a college. Attending Catonsville Community College, even as a continuing education student, was viewed as more positive than taking "reading classes".

Finally, and perhaps the most significant factor contributing to the success of these meetings, relates to the expected outcomes of the session. Employees were not expected, or even permitted, to sign up for classes after these sessions. The only commitment workers made was to attend an assessment session to help them and the college determine if they needed basic skills classes. This approach was less threatening to workers than committing to twelve weeks of classes. More were willing to "test the waters" by taking the assessment with no further commitment required. Interestingly enough, almost all workers whose initial assessment indicated a need for classes did sign up for classes. Data demonstrating the success of the employee recruitment program are included in the Outcomes and Objectives section of this report.

ASSESSMENT

The first step in the assessment process was an evaluation of current and future literacy demands of the printing industry. This step was begun prior to the initial implementation of ***Skills Today for Tomorrow.*** A CCC team conducted literacy task analyses at six PIM member companies in 1990. As a result of the work of this committee, a list of competencies was developed and has since been correlated with the competencies identified through the CASAS assessment instruments.**(SEE EXHIBIT C)**

The assessment procedures delineated in the original proposal had to be altered slightly. The NAPL WorkPLACE^{R} program assessment instrument is an anonymous needs assessment that company managers may administer, send to NAPL for scoring, and analyze results to determine if there is a basic skills need in their plants. This type of assessment, while filling an important need in the industry, did not meet the needs of ***Skills Today for Tomorrow***. In addition, the Maryland State Department of Education mandates that literacy programs in the state use the Comprehensive Adult Student Assessment System (CASAS) to unify reporting data. Therefore, ***Skills Today for Tomorrow*** assessed participants using CASAS.

Initial assessment was for placement purposes only. Employees who signed-up for assessment at the interest-generating sessions committed to a two hour assessment session. The "T Word" (test) was never used, and assessment was used only in a limited way. Instead the sessions were called "Information Sessions" or "Orientation Sessions" and the purpose defined as:

- an opportunity for interested workers to ask questions about the program

- an opportunity for CCC staff to measure each worker's skills to determine if the program is needed

The company scheduled assessment sessions on company time approximately one-two weeks after the employee meetings. It was important to maintain the interest and excitement generated at the meetings prior to the assessment sessions. Assessments were conducted in groups of up to 25 individuals, frequently back to back, and in some cases, all day and all night long.

The Curriculum/Assessment Coordinator conducted the sessions. A portion of the time was committed to reducing test anxiety for the workers. For most of the participants, this was the first test they had faced in many years. The CASAS Workplace Appraisal Form 200 was used for reading placement and the Maryland version of the CASAS math appraisal Form 75 was used for math placement. Both tests are untimed, but most workers were finished with each assessment in approximately 30-40 minutes. In addition, a workplace-based writing sample was solicited from each participant.

The Curriculum/Assessment Coordinator scored all assessments and prepared individual reports for employees in sealed CCC envelopes. Project staff returned to the company approximately 1-2 weeks after assessment to report scores to the workers and begin the enrollment process. Scores were returned in group meetings with an interpretation presented for all levels. Only the individual employee knew which level referred to his or her specific situation. The Project Director and other staff members were available for individual counseling sessions after the general reporting session.

After employees received their scores, they completed an "Interest Statement," indicating their decision and commitment to involvement in ***Skills Today for Tomorrow***. The results of these interest statements were compiled and given to the Site Coordinator at the company for scheduling purposes. All class scheduling was done by the company.

This system worked quite well. Employees did not feel compelled to enroll in classes, but based on their needs, knew which level to enroll in if they were interested. Most employees who indicated a need on the appraisal expressed interest in classes. Some were unable to attend due to scheduling conflicts, however. If an employee did not enroll in classes, confidentiality was maintained by this system and the employer did not know that worker's level of need.

The CASAS, though certainly not a perfect instrument for measuring worker needs, had an unanticipated advantage in this situation. Workers were NOT demoralized or discouraged by their scores, even if the scores were quite low. CASAS is a competency-based assessment and results are reported as scale scores. There are no grade level, percentage, or other readily-identifiable indicators of level. Each employee received a three-digit number which had no inherent meaning to him or her. The Project Director explained those scores in terms of ***Skills Today for Tomorrow*** and in which part(s) of the program the worker should enroll. Few workers, if any, left the score sessions feeling they had failed another test.

Workers were placed into the program according to the following guidelines:

RECOMMENDED LEVELS OF CLASS ENROLLMENT:
(represents scale scores on initial appraisal)

Level 1 :	either reading or math < 221
Level 2 :	either reading or math 221-230
Level 2+:	both reading and math ≥ 231

LEVEL I ASSESSMENT

Once employees began their Level I classes, the CASAS Survey Achievement tests (Forms 31 -36) in Reading and Math were administered to identify specifically which competencies they needed to master. In addition, each participant produced a writing sample which was evaluated by the instructor. The experience of this project indicated that workers scored much higher on the Survey Achievement test than the appraisal scores would indicate. In several instances, a higher level of the Survey Achievement test needed to be administered in order for the instructor to identify the individual's needs.

The following criteria were used to place learners in the correct Survey Achievement test:

SCALE SCORE INTERPRETATION FOR APPRAISAL:
(used to determine which level of pre-test to administer)

Reading	<200:	Level A
Math	<200:	Level B
Reading	200 - 215:	Level B
Math	200 - 215:	Level B
Reading	216+:	Level C
Math	216+:	Level C

Another problem with the CASAS that surfaced almost immediately made it difficult to relate CASAS scores to the printing industry-identified competencies the project was to address. To alleviate this problem, CCC used an item-analysis correlation of the CASAS tests forms 31-36 developed during the first round. **[SEE EXHIBIT C]** This enabled all instructors to identify immediately the individual's needs in terms of the industry-identified

competencies. Those competencies not measured by the CASAS were measured by the instructor using more informal diagnostic procedures once class had started. In addition, CASAS assessments generally do not register measurable gains without a minimum of 75-100 hours of instruction between administration of the pre and post forms. Level I classes in ***Skills Today for Tomorrow*** were scheduled for 48 instructional hours.

LEVEL II ASSESSMENT

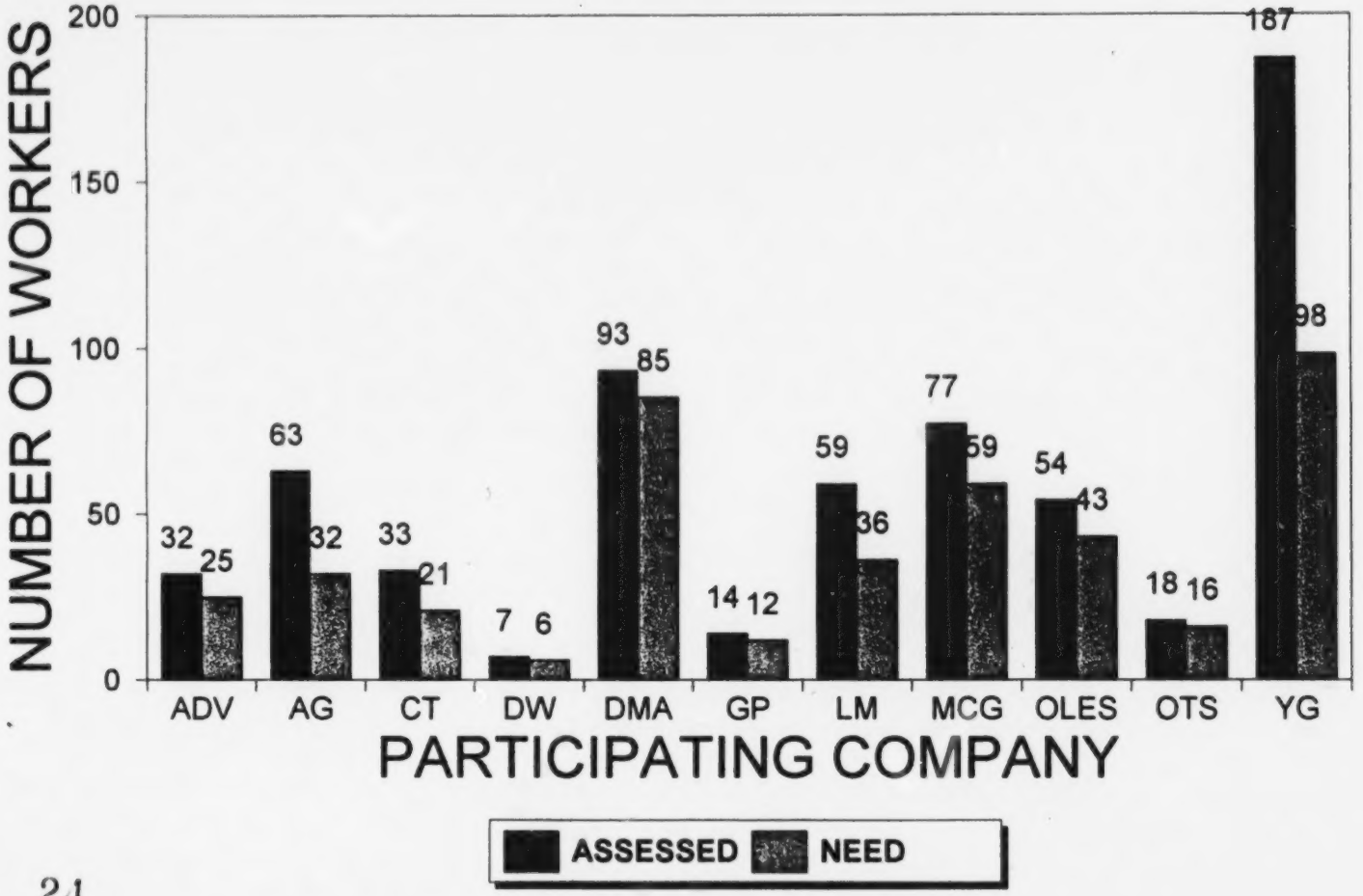
Each module in Level II had its own pre and post assessment. The CASAS system was not used in the Level II modules.**(SEE EXHIBIT D)**

CUSTOMIZED ASSESSMENT

As part of this project CCC had proposed to develop a new work-based assessment instrument. During the first project, project staff felt the need for a single assessment that would provide both placement and diagnostic information during the initial assessment sessions. The goal of creating a new assessment was to meet this need, reducing assessment time and providing valuable information prior to the start of classes. Much of the development of this assessment was done by an instructor/developer from the first round grant. She used materials and documents from participating companies to develop test items. A panel of reviewers evaluated each test question and assigned a level of difficulty to it to place it in one of three levels. The panel of reviewers were reading and math basic skills experts, college faculty, and workplace literacy instructors.

Unfortunately, the assessment instrument was not developed in time to use in the project, since classes began almost immediately. Therefore, it was field-tested in classes outside the workplace literacy grant. A number of difficulties were identified and the developer made revisions to the original instrument. She also developed a post-assessment instrument to measure gains after instruction. Both instruments need further field testing to validate their effectiveness. A copy of each is included in this report.**(SEE EXHIBIT E)**

WORKER ASSESSMENTS
DEMONSTRATED NEED



INSTRUCTION

Skills Today for Tomorrow was designed with a great deal of flexibility to meet the needs of as many workers as possible during the eighteen months of the project. The program focused on worker needs at two levels. Placement into the program was based on an initial appraisal. (see Assessment section) Placement recommendations were made to employees when they received their scores.

All classes, regardless of level and content, met twice weekly for two hour sessions. Classes were scheduled at shift changes since the employees were granted 50% release time. (At one company, McGregor Printing, classes were offered 100% on company time and thus completely during the work day.) All classes were held on-site at the participating company. One site (Automated Graphics) served as a cooperative site and employees from more than one company attended classes as that site. For a complete description of classes at each site, refer to the "Site Summary" pages of this report.

LEVEL I

Placement into Level I classes indicated that a worker's skills were not sufficient to enroll in Level II classes. Level I featured greater flexibility in both scheduling and curriculum. For registration purposes, these classes were twelve weeks in duration, four hours per week for a total of 48 instructional hours. However, Level I classes were open-exit, and each participant was able to exit upon demonstrating mastery of the competencies he/she needed. If, at the completion of the scheduled class, some of the workers had not yet mastered all of their competencies, a second round of Level I classes was scheduled, with instruction picking up where it stopped.

The instructional approach in Level I was individualized and competency-based. Upon entry into the program, each participant met with the instructor to discuss individual goals and the results of the diagnostic assessment. During these sessions, the learner and instructor cooperatively developed the Individual Learning Plan (ILP) which would guide the learning process during the class. **[SEE EXHIBIT F]** Both the instructor and learner signed the ILP indicating joint agreement with the program.

Instructors maintained a "Competency Profile" on each learner. **[SEE EXHIBIT G]** This profile indicated which industry-identified competencies the worker demonstrated upon entry into the program and the date others were mastered. This profile provided valuable data for each instructor as the learner progressed through the program. It also gave the

student visible evidence of his or her progress. This was especially important when little or no evidence of progress manifested itself in post-test scores.

Level I instruction in ***Skills Today for Tomorrow*** covered reading, writing, and math each class. Because the instruction was so individualized, learners focused only on those areas in which they needed help. A wide range of skill levels existed in each of the Level I classes, from little or no reading skills to approximately 7th or 8th grade level. (This is only an estimate as no assessment to determine grade level was administered.)

Instructional delivery took on numerous forms. A limited number of teacher-directed lessons was included in the class. Each instructor used varying amounts of grouping, cooperative learning activities, peer-tutoring, and independent work. Since each class was unique, this flexibility was essential, and proved very effective. Learners were delighted, and surprised, to learn from and help each other during and between classes.

Upon completion of the competencies in Level I, most learners were ready to enroll in one or more of the Level II modules.

LEVEL II

Some workers were placed directly into Level II classes as a result of the initial appraisal. Others enrolled in Level II modules after completing the Level I classes. Level II was comprised of three distinct classes:

On the Job Math	12 weeks	48 hours
Critical Thinking & Problem Solving	8 weeks	32 hours
Workplace Communications	12 weeks	48 hours

These three classes were offered as separate modules. While no particular order was required, these classes generally followed the above sequence. Each module had defined start and end dates, and open-exit was not an option.

Each module included a pre and post assessment specific to the curriculum. As in the Level I classes, instructors maintained a "Competency Profile" on every learner to document competency gains in meeting the objectives of the module. **[SEE EXHIBIT G]** Instructional delivery in the Level II classes included more teacher-directed lessons for the most part. However, the Critical Thinking and Problem Solving module involved a great deal of group work, since the problem solving model used a team approach.

LITERACY TASK ANALYSES

Skills Today for Tomorrow instructional staff conducted Literacy Task Analyses (LTA) in order to develop a job-specific curriculum and to offer an effective work-based education program. Since the project included eight different companies representing very diverse areas of the printing industry, an LTA of every job in every company was out of the question. This was further exacerbated by the unavoidable delays in hiring and the necessity of starting classes almost immediately.

The Curriculum/Assessment Coordinator, working with the instructor/developers, customized the LTA process to meet the unique needs of this project. During the initial supervisors meetings the Project Director asked supervisors to identify specific needs in their respective departments. Most were eager to state what their workers needed to do better. Supervisors also identified two or three competent workers from their departments. The Project Director requested workers who would be able to clearly articulate the details of their jobs. Each supervisor and competent worker involved in the process also helped by providing both blank and completed copies of various workplace documents.

Instructor/developers created simplified Task Analysis forms to use in worker interviews. **[SEE EXHIBIT H]** To streamline the LTA process, the developers met with workers from one department in a group to gather details about the tasks done in that department. Later the workers took the developers onto the plant floor for observations of the job in progress. Developers were permitted to spend as much time as needed watching workers and asking questions. These interviews and modified shadowing produced sufficient data for the developers to develop the curriculum. Additional documents and information rapidly surfaced once classes began and each instructor asked learners in that class to identify their job tasks and needs. This process took place at all sites in ***Skills Today for Tomorrow***.

CURRICULUM

Curriculum development was an integral part of ***Skills Today for Tomorrow***, and graphic arts industry-specific curricula in basic skills, critical thinking, and communications were the end products of the project.

LEVEL I

In addition to using the curricula developed during the first workplace literacy project, the instructional staff created new curriculum activities for Level I using the Literacy Task Analyses (LTA) and documents from each company that participated in the project. This curriculum, which includes reading, writing, and mathematics activities, focuses on basic skill improvement at levels below the 8th grade. Since the basis of the this curriculum was developed during the initial grant, most of the Level I development conducted during this project was supplementary in nature. Copies of any new activities are included in this report. Each learning activity in the Level I curriculum is based on one of the objectives identified by the PIM committee and the CCC instructional team as necessary for the printing industry. Employees concentrated only on those objectives in which the assessment indicated a need, allowing each individual to exit the program upon attainment of the necessary competencies. The Project Director and Curriculum/Assessment Coordinator, working in conjunction with the instructors, purchased additional commercially-published materials to supplement the job-specific curriculum. This blending of curriculum materials worked quite well.

A list of those materials follows.

SUPPLEMENTARY MATERIALS - LEVEL I CURRICULUM

TITLE	PUBLISHER
Math	
Math Skills by Objective, Books 1 - 3	Cambridge
Basic Essentials of Mathematics, Books 1-2	Steck Vaughan
Number Skills for Life & Work	Simon & Schuster
Pre-GED Math Exercises	Cambridge
Breakthrough to Math	Center/Workforce Ed.
Practical Problems in Math for Graphic Arts	Delmar
Reading	
Reading for Workplace Success	Paradigm
Megawords, Books 1-8	Educators Publishing
Reading Skills for Life & Work	Simon & Schuster
Pre-GED Reading	Cambridge
Writing	
Writing for Workplace Success	Paradigm
English Skills by Objective, Books 1 - 3	Cambridge
Document Skills for Life & Work	Simon & Schuster
Language Exercises for Adults	Steck Vaughan
Pre-GED Writing	Cambridge
Other	
More Than A Job	Center Workforce Ed.
Thinking Skills for Success	Paradigm

LEVEL II

Level II used the Math Module of the WorkPLACE curriculum designed by NAPL and the Carl Didde Corporation to address the specific skills needs of the printing industry employees. **(SEE EXHIBIT I)** The objectives of the Level II curriculum have been correlated with the competencies identified by PIM to ensure and appropriate instructional program.

During the first grant, project staff did extensive research into various known models for problem solving and developed a five-step model affectionately known as the DOSIE:

D Define and analyze the problem
O Originate solutions
S Select a solution
I Implement a solution
E Evaluate the solution

Workers learned this process and applied it in a wide range of problem solving applications in the Critical Thinking/Problem Solving Module. The Curriculum/Assessment Coordinator refined this model and reworked the materials during this second project. The revised materials included new assessment methods, a set of five review/quick reference cards for the learner, and new problem-sets. Additionally, an instructor's manual was also developed. A copy of this curriculum is included with this report.

The Communications Curriculum used in the first grant had been put together quickly to replace the yet-to-be-published NAPL curriculum and the project staff was not fully satisfied with it. During this second grant, the Curriculum/ Assessment Coordinator completely re-wrote and developed a Communications module to be used in this project. This module included not only the reading and writing components, but also stressed verbal and non-verbal communications on the job. A copy of this curriculum is included with this report.

The NAPL WorkPLACE^{R} curriculum entitled On the Job Math formed the basis of the On-the-Job Math module. This project was one of the first nationwide to implement this curriculum into a workplace learning program.

PARTICIPANT RECOGNITION

Since many of the participants in ***Skills Today for Tomorrow*** have not been in any kind of educational program for quite a few years, the project staff felt it was important to encourage success by celebrating success. Once this process was implemented, it grew and became an integral part of every class.

Skills Today for Tomorrow participants who successfully completed the program received a Catonsville Community College Continuing Education certificate. This certificate is issued to all individuals who complete CCC continuing education classes. Generally, the certificate is mailed to the students' homes. However, in ***Skills Today for Tomorrow***, the project staff held a graduation at the end of each class at each site. Invited to the ceremony were the CEO of the company, plant managers, supervisors, CCC representatives, and PIM representatives. The presence of the company and project partner leadership added to the significance of the event for the participants.

All of the guests were invited to speak to the class if they desired. The Project Director presented the certificates to each participant, offering each the opportunity to speak to the group. Generally participants thanked the company, the program, and especially their instructors. This was a very worthwhile and moving portion of every graduation. It sent a strong and effective message to the company--in a way the project staff could not.

These graduations were originally intended to be a means of recognizing success in the program on a small scale. The participants were delighted at the prospect of each upcoming graduation and expanded the ceremony beyond the original intent. Each company provided refreshments, yet the participants brought in great quantities of food and additional refreshments, seemingly eager to share their success in other ways.

OBJECTIVES AND OUTCOMES

Every effort was made during the life of the project to effectively evaluate the program. Project staff collected data on pre- and post-test scores for Level I, and competency mastery for all modules in Level I and II. Data was also collected by instructors and compiled by the Project Director regarding assessments, registrations, enrollments, and completions in order to determine whether or not the project met its goals and objectives.

"Enrollments by Course and Company" (p.31-32) charts a listing of worker enrollments in each class offered at all participating companies. Of the total enrollments, 52% were in Level I classes, and 48% were in Level II modules.

"Worker Enrollments By Company" (p. 33) indicates the number of individuals who were assessed and who enrolled in classes at each site. Percentage of employees enrolled is shown in the data chart.

The graph on page 34, "Identified Need and Actual Enrollments," demonstrates the number of individuals whose assessment scores showed a need for instruction and who actually enrolled in classes.

Since ***Skills Today for Tomorrow*** was a multi-level program with four distinct classes available to participants, some workers enrolled in more than one class. The "Program Participation" graph on page 35 compares the number of individuals with the total number of enrollments in the program.

Page 36 graphs the total number (31) of Level I and Level II classes held at each site.

Site Abbreviations:

ADD	Advantage Book Binding
AGS	Automated Graphic Services
CT	Catterton Printing
DW	Dick Wildes Printing
GP	Garamond-Pridemark Press
LM	Landmark Printing
McG	McGregor Printing
OLES	Oles Envelope Corporation
OTS	O. T. Smith Company
YGS	York Graphic Services

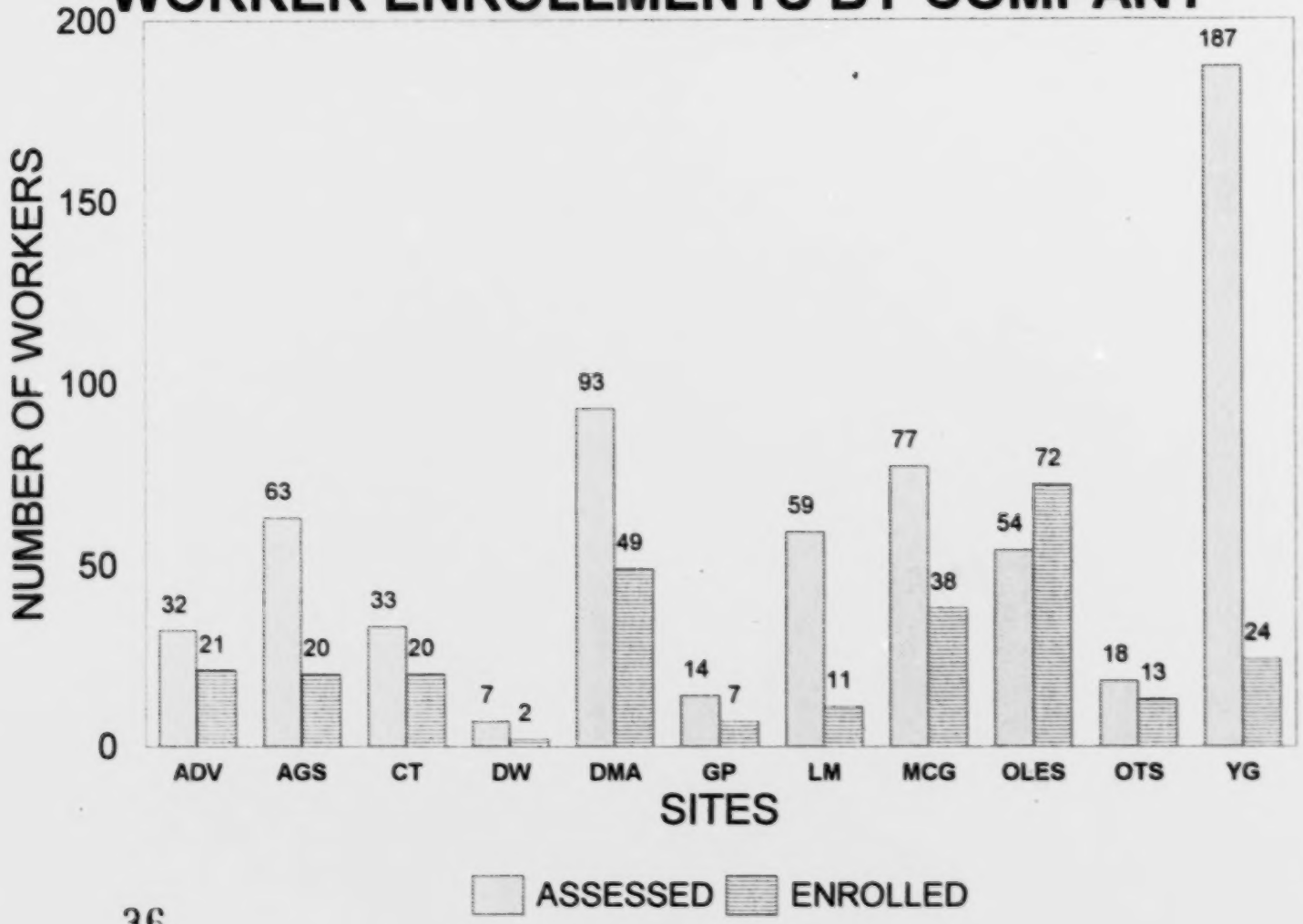
ENROLLMENTS BY COURSE AND COMPANY
MAY 1993 - APRIL 1995

CLASS	INS	ADD	AG	DMA	CT	DW	GP	LM	MCG	OLES	OTS	YG	TOT
WPL 001	DR	12		35									47
	JC		7										7
	JC				5								5
	MG						7						7
	MW								18				18
	JF									28			28
	LAM										7		7
	LJ			14									14
						2							2
TOTAL LEVEL I ENROLLMENTS													**135**
WPL 002	JC		5										5
TOTAL LEVEL I CONTINUATION ENROLLMENTS													**5**
WPL 004	LJ									12			12
	CS									7			7
	RR											5	5
	LM										6		6
	MW							6					6
TOTAL LEVEL II MATH ENROLLMENTS													**36**

CLASS	INS	ADD	AG	DMA	CT	DW	GP	LM	MCG	OLES	OTS	YG	TOT
WPL 007	BD		8										8
	DD	9											9
	BA				9								9
	MJW							5	9				14
	JF									8			8
	GM/TD											7	7
TOTAL LEVEL II CRITICAL THINKING ENROLLMENTS													**55**

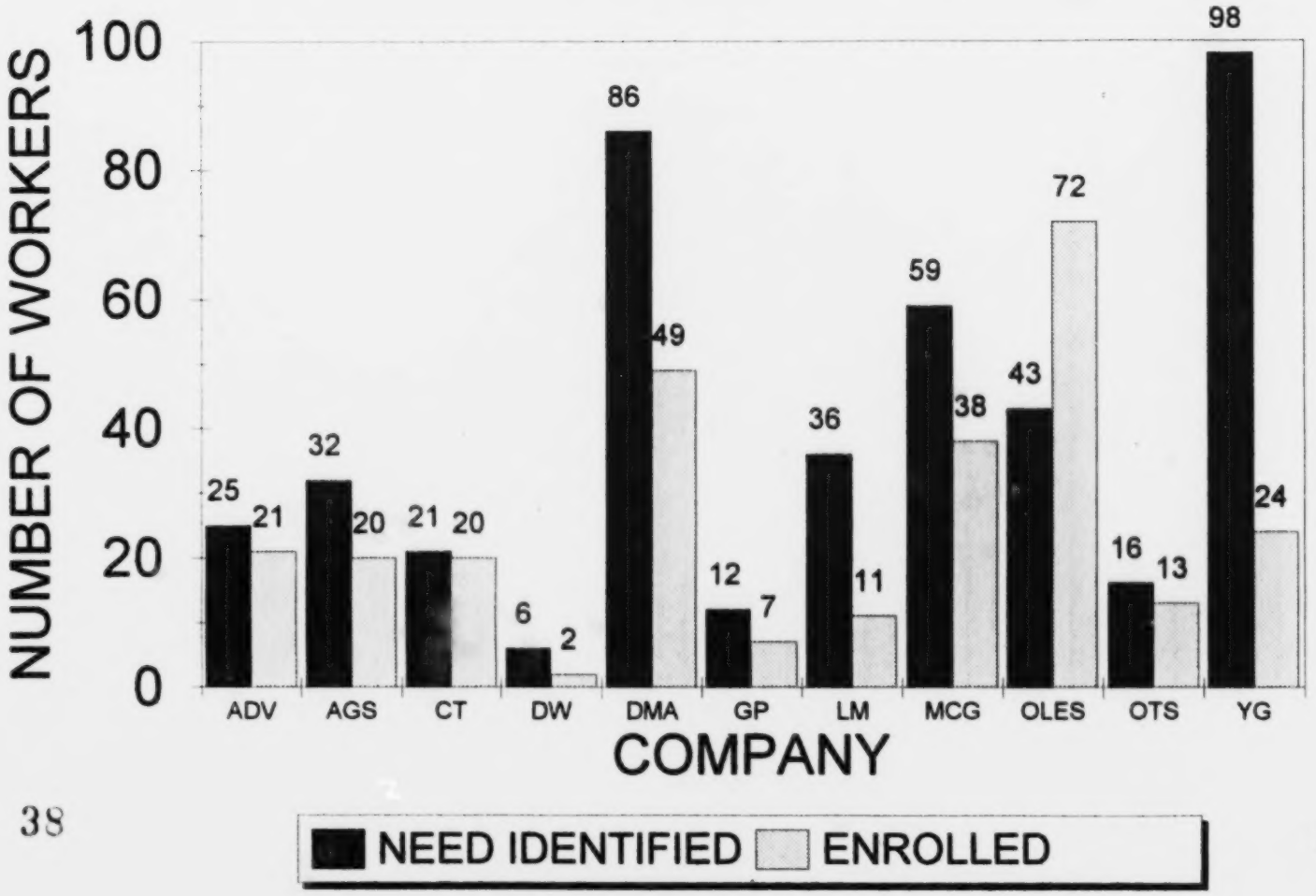
WPL 008	MJW								11				11
	CS									17			17
	VZ											7	7
	TD											5	5
TOTAL LEVEL II COMMUNICATIONS ENROLLMENTS													**40**
TOTAL LEVEL II ENROLLMENTS													**131**
TOTAL ENROLLMENTS													**271**

SKILLS TODAY FOR TOMORROW
WORKER ENROLLMENTS BY COMPANY

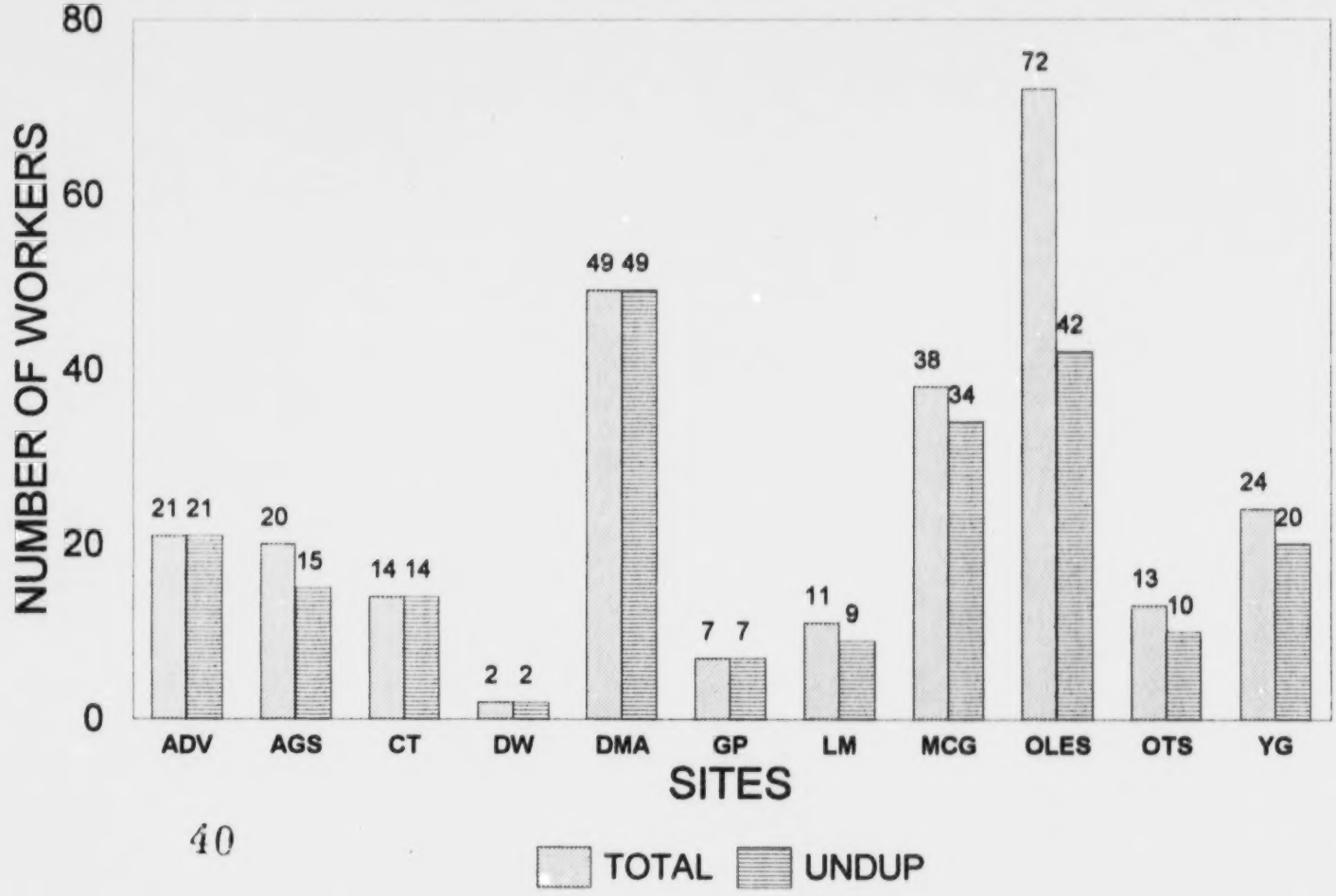


SKILLS TODAY FOR TOMORROW

WORKER ENROLLMENTS BY NEED

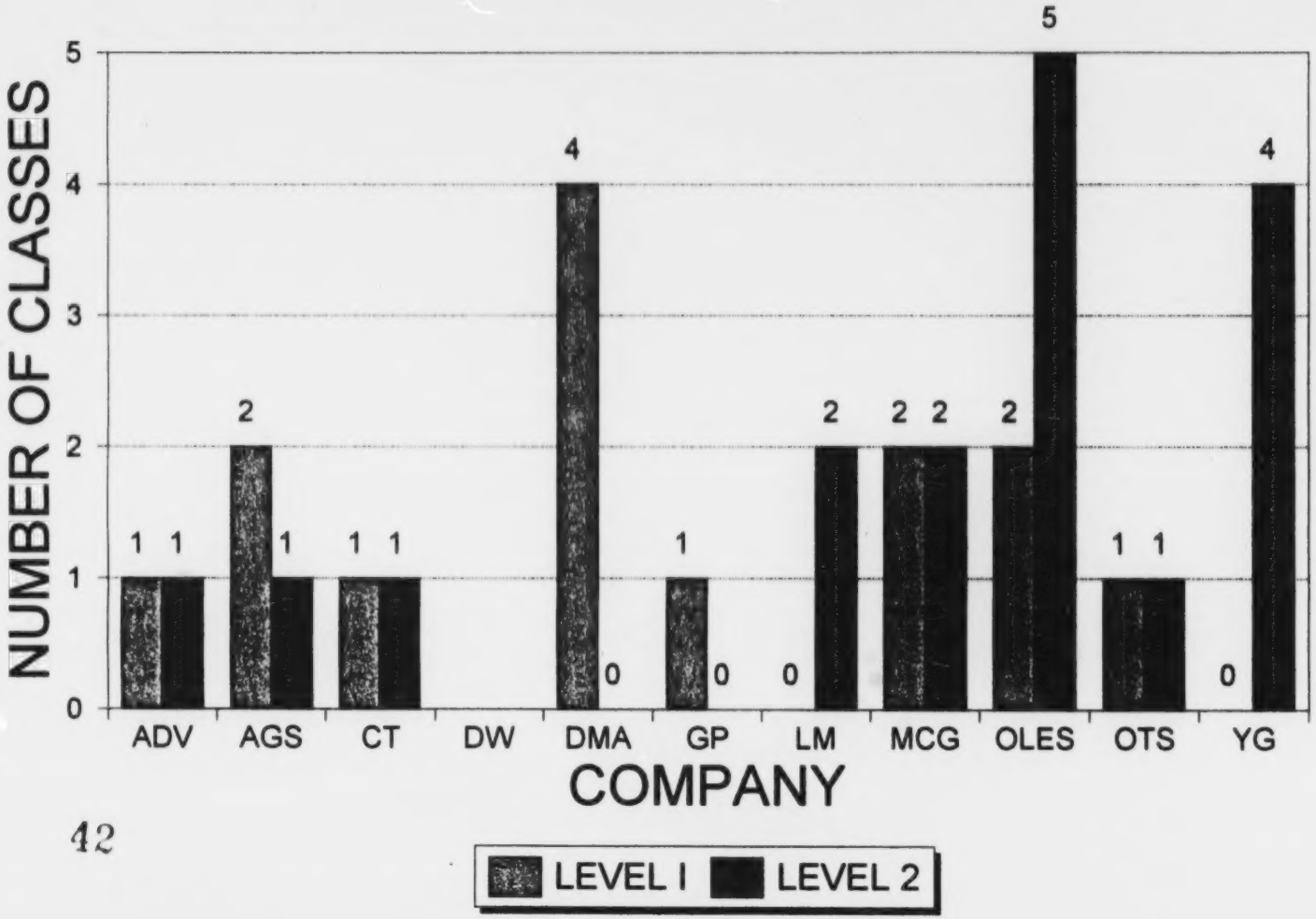


SKILLS TODAY FOR TOMORROW
TOTAL/UNDUPLICATED ENROLLMENT



SKILLS TODAY FOR TOMORROW

CLASSES OFFERED

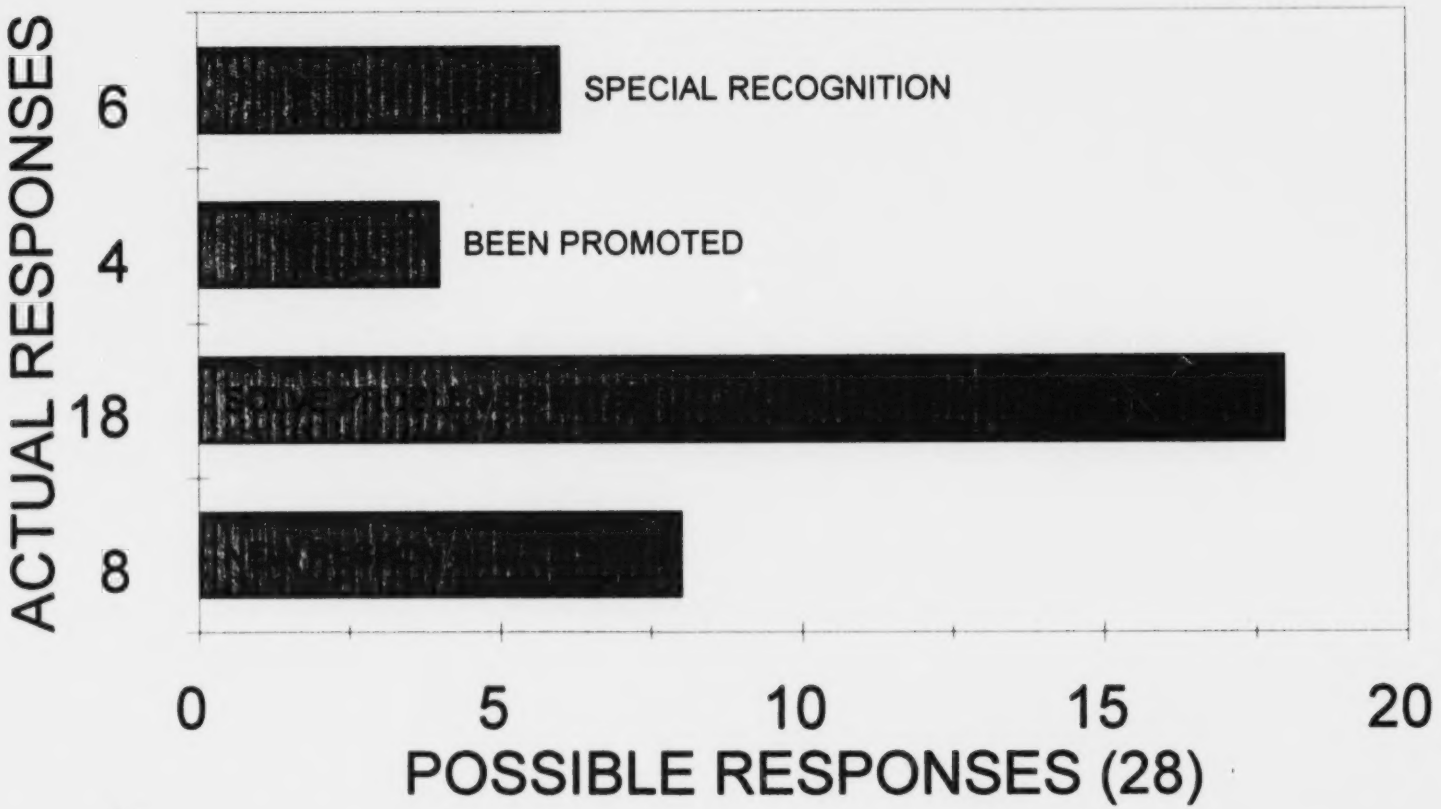


COURSE FOLLOW-UP

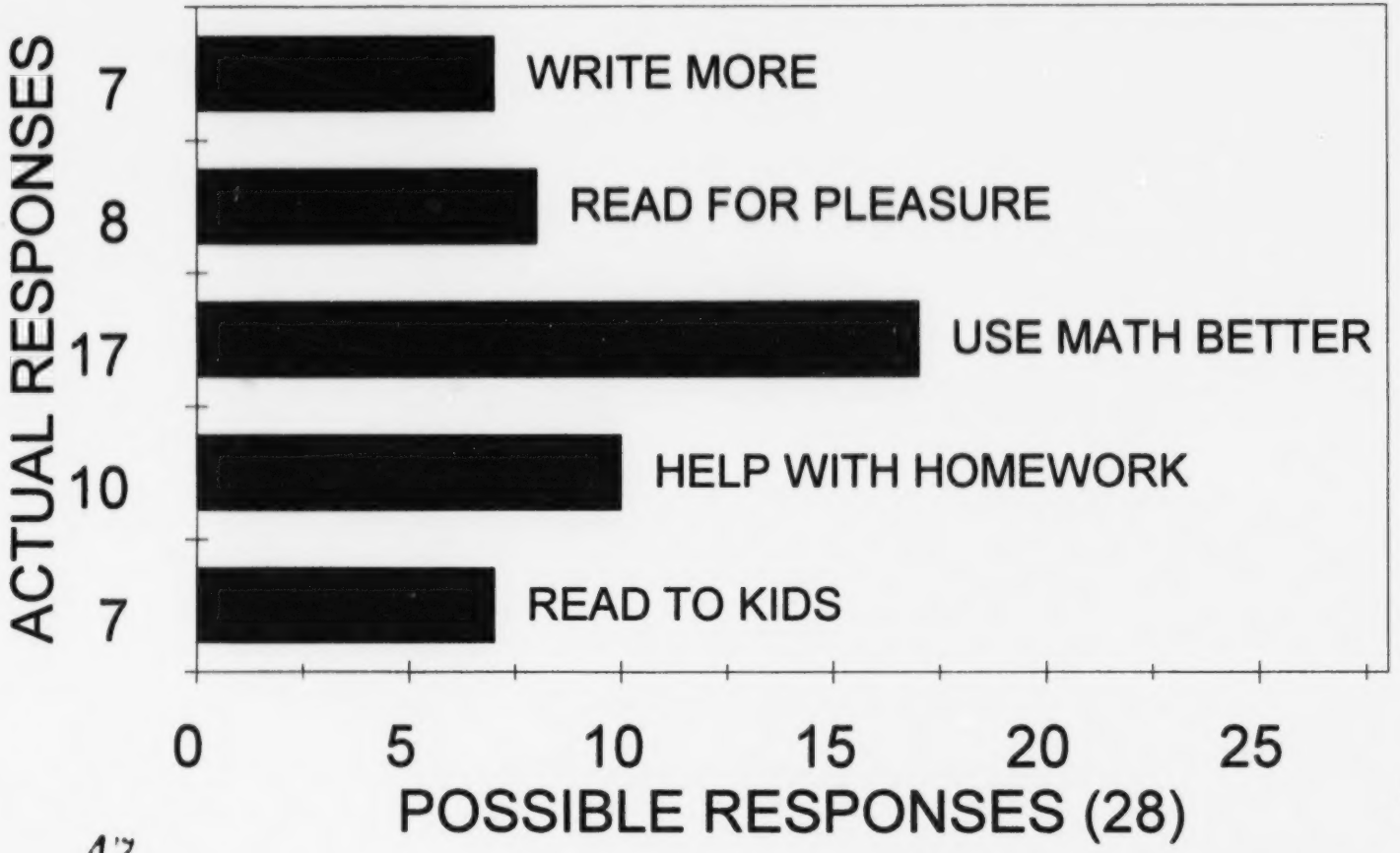
Skills Today for Tomorrow was interested in data regarding participant perceptions of their abilities after completion of one or more classes in the program. Therefore, several months after the end of classes, a "Course Follow-Up Inventory" was sent to every worker who had participated in on or more module in ***Skills Today for Tomorrow***. **(See Exhibit J)** These surveys measured the participant's own evaluation of their ability to communicate, read, write, and speak, their ability to work with numbers, and any particular advancements or successes they have experienced as a result of the project.

Pages 38-40 chart the qualitative changes workers reported as a result of ***Skills Today for Tomorrow*** in work-based, education-based, and personal outcomes.

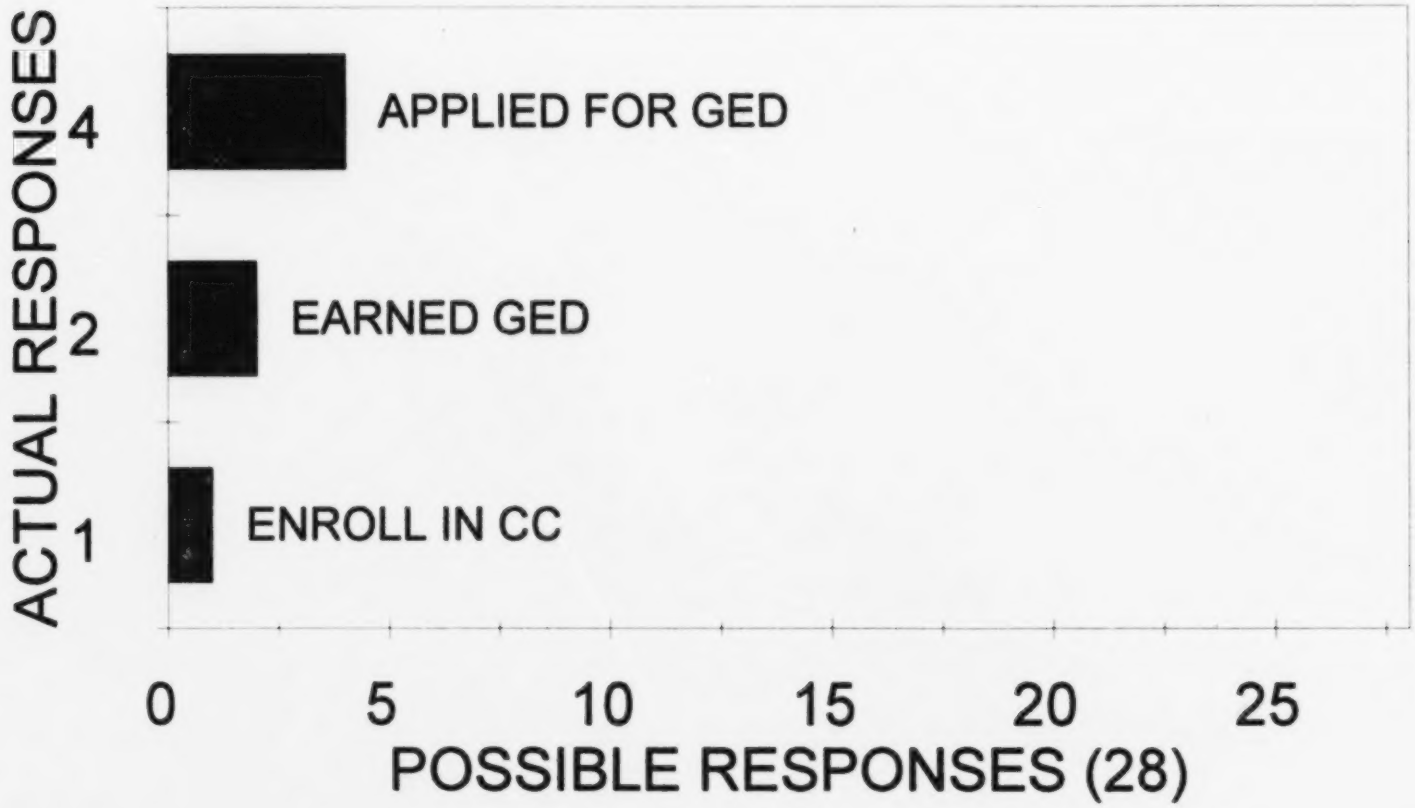
WORKER FOLLOW-UPS
WORK-RELATED OUTCOMES



WORKER FOLLOW-UPS
PERSONAL OUTCOMES



WORKER FOLLOW-UPS
EDUCATION-BASED OUTCOMES



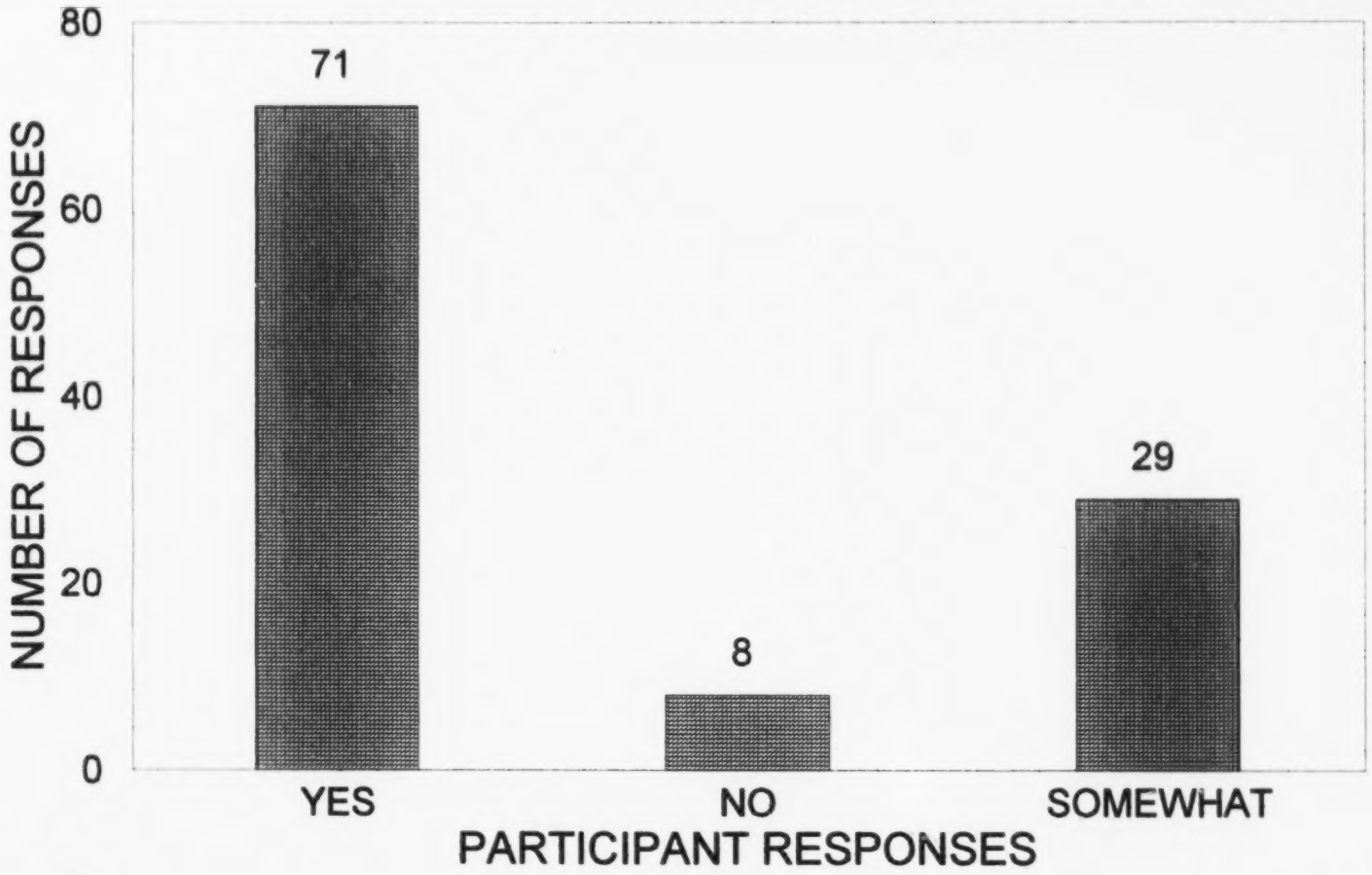
EVALUATION

Skills Today for Tomorrow proposed both formative and summative evaluation. R. G. Wasdyke and Associates of Annapolis, Maryland served as the external evaluator. A copy of the external evaluation report is included with this report.

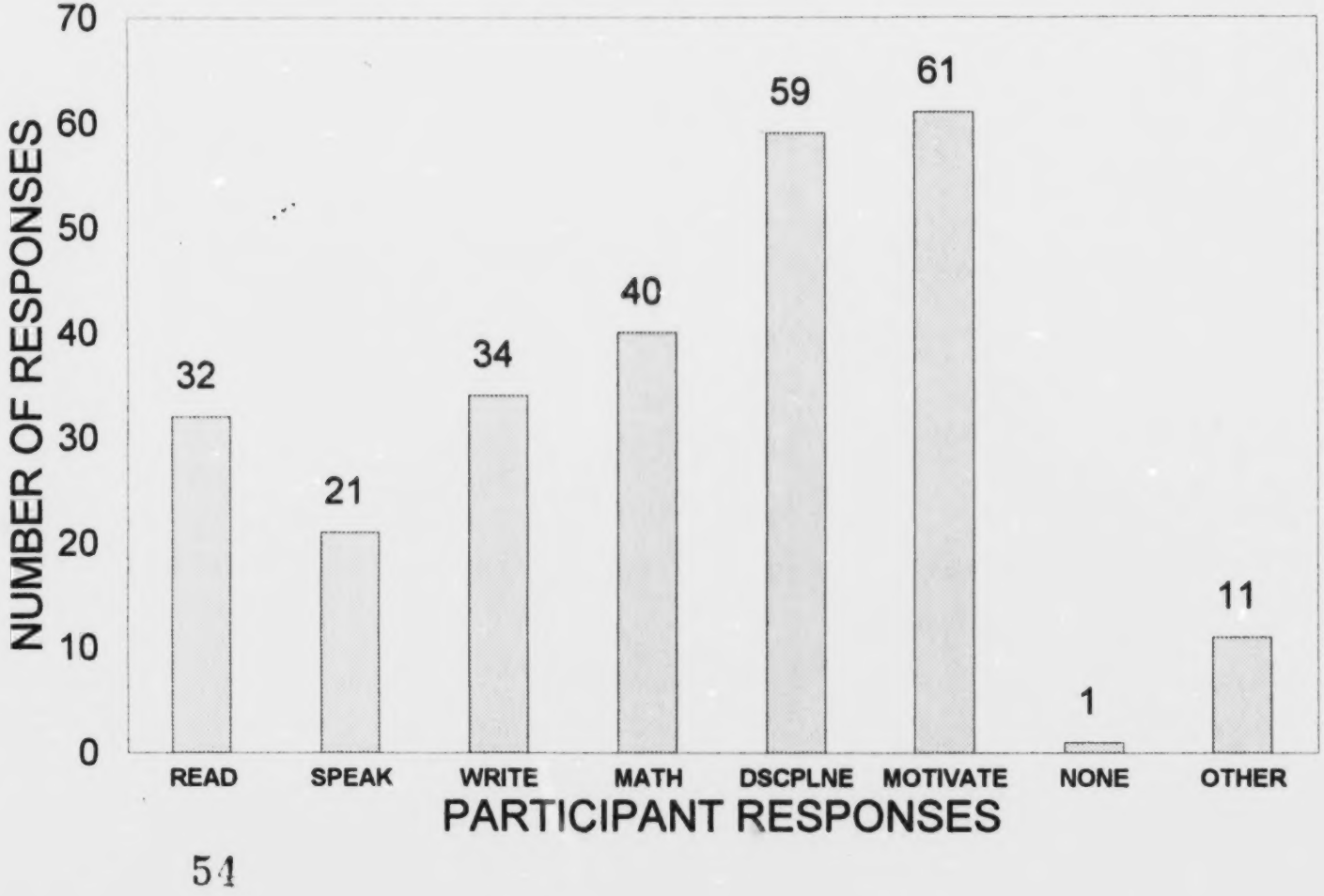
This project made an active attempt to evaluate and adjust the program on an on-going basis. The Project Director made herself a very visible presence in most companies and in most classes. She opened each class, made site visits during each module, and returned for the closing ceremony of each class. In addition, she made numerous unscheduled visits, especially during the early phases of the project. During every visit, she spoke to the entire class and to individuals as well seeking informal feedback about the class, content, instructor, materials, and program organization. This feedback proved very useful in adjustments for future classes.

More formal evaluation measures included a "Course Evaluation" completed by every student during the last class session. **[SEE EXHIBIT K]** In an effort to encourage participants to give honest responses, the instructor was not present while learners completed these evaluations. A quantitative analysis of these evaluations is included in the graphs on pages 42-54. Participant responses clearly indicate satisfaction with the program. Page 55 summarizes some of the worker comments included on the evaluation forms.

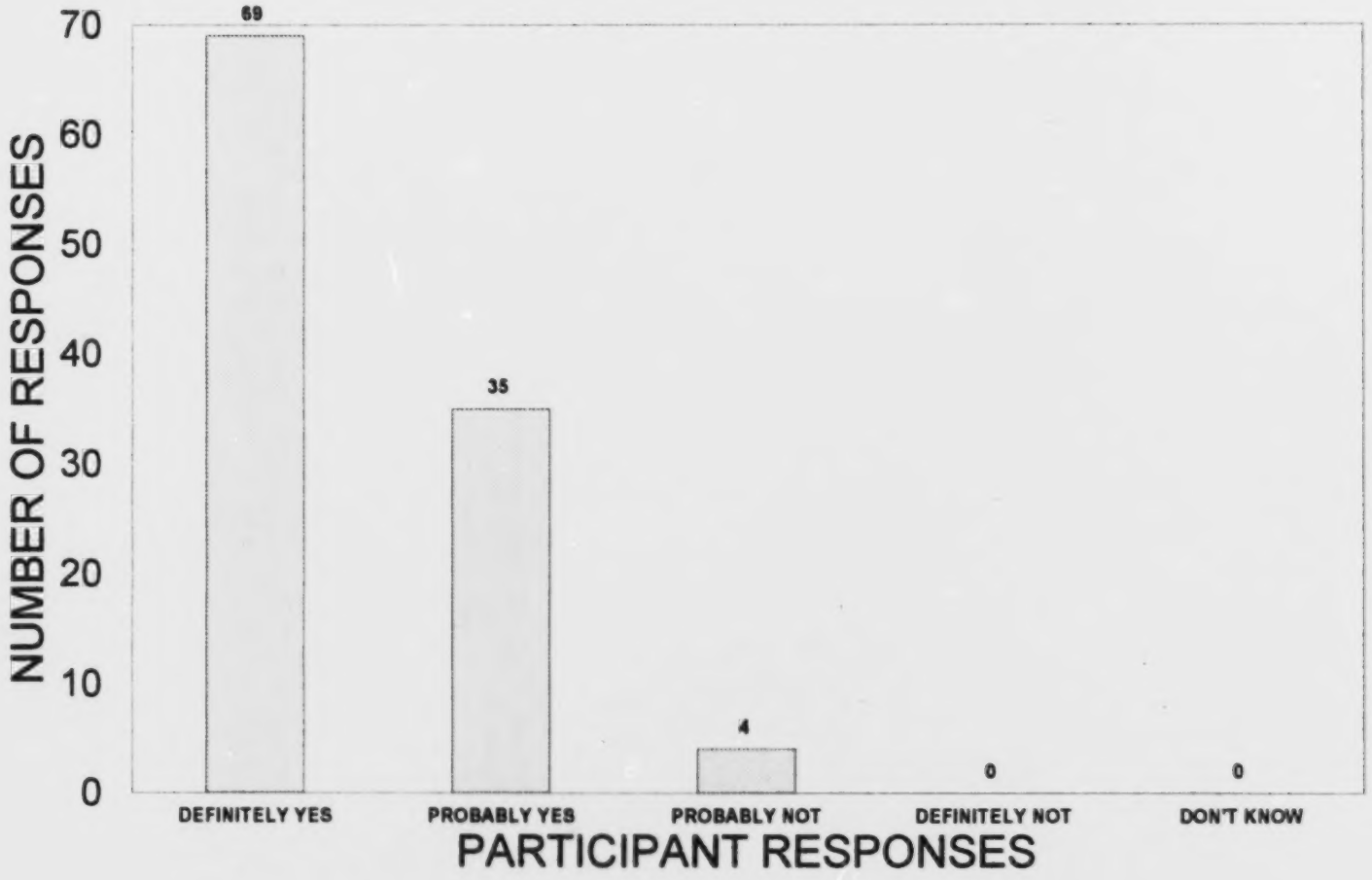
HAVE YOU REACHED THE GOAL(S) YOU SET WHEN YOU STARTED THIS CLASS?



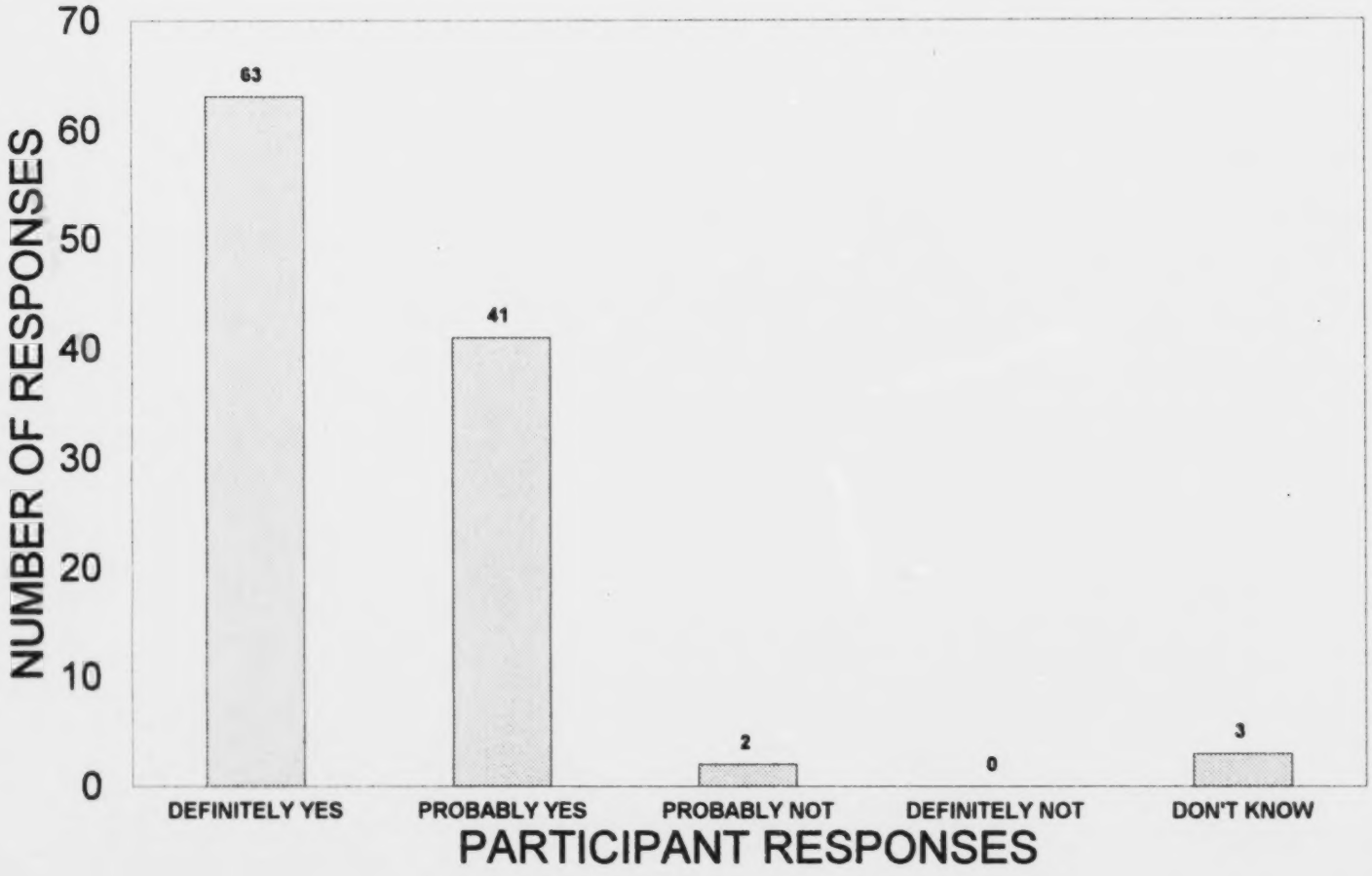
WHAT SKILLS DO YOU THINK THIS CLASS HAS HELPED YOU TO IMPROVE?



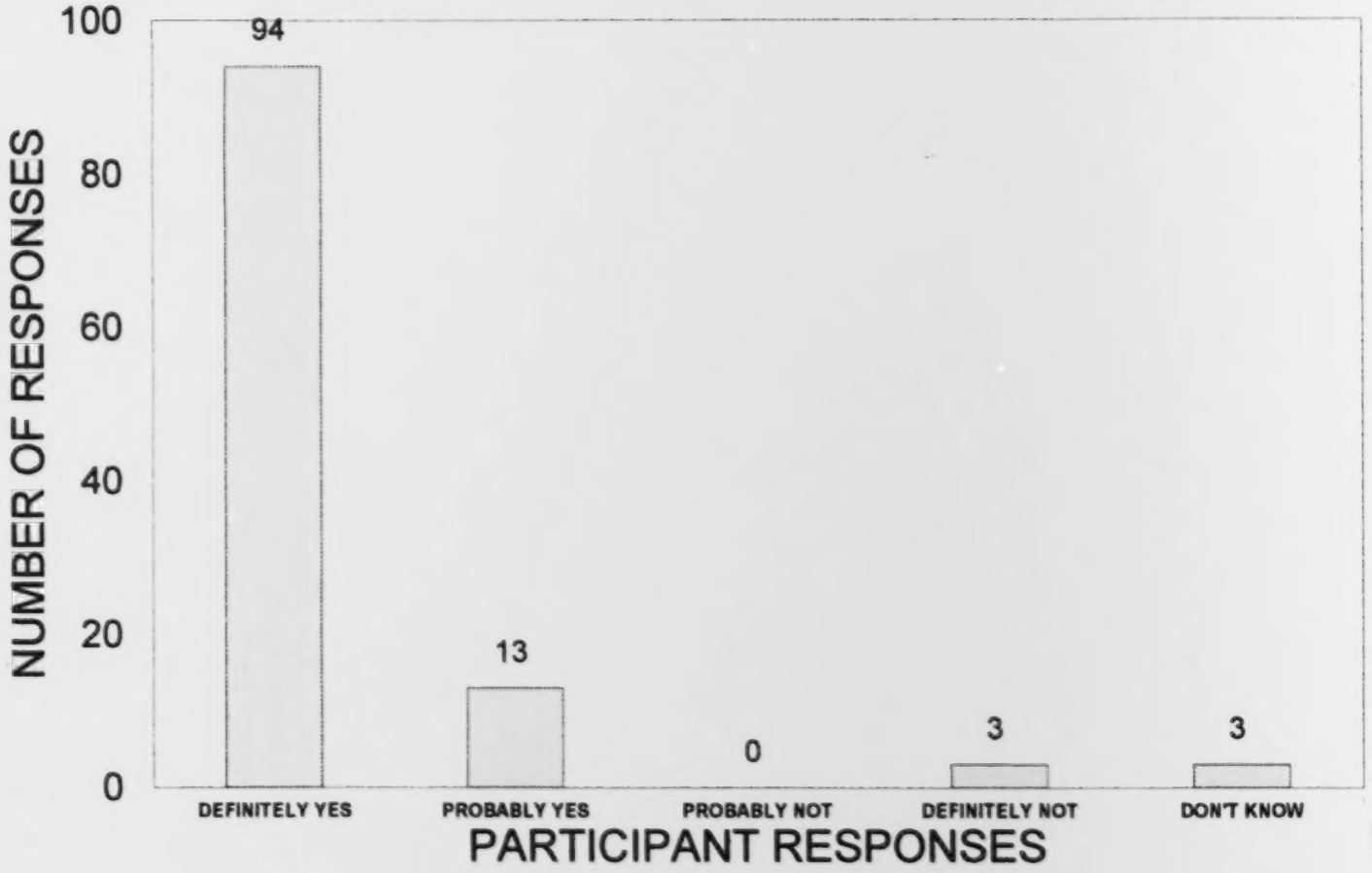
IN RELATION TO YOUR GOAL(S) WAS THIS CLASS HELPFUL TO YOU?



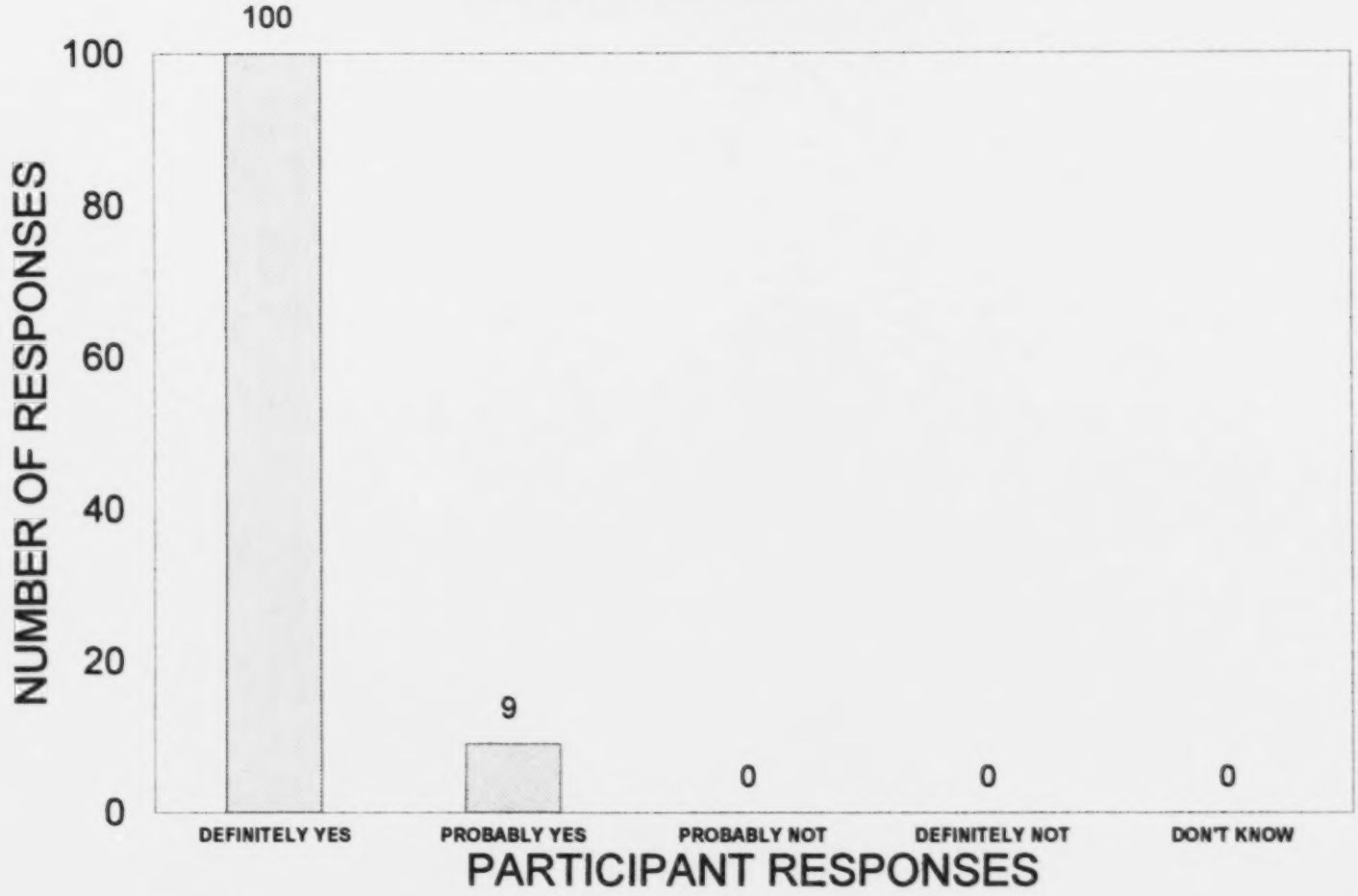
DID THE SKILLS YOU LEARNED IN THIS CLASS HELP YOU DO YOUR JOB BETTER?



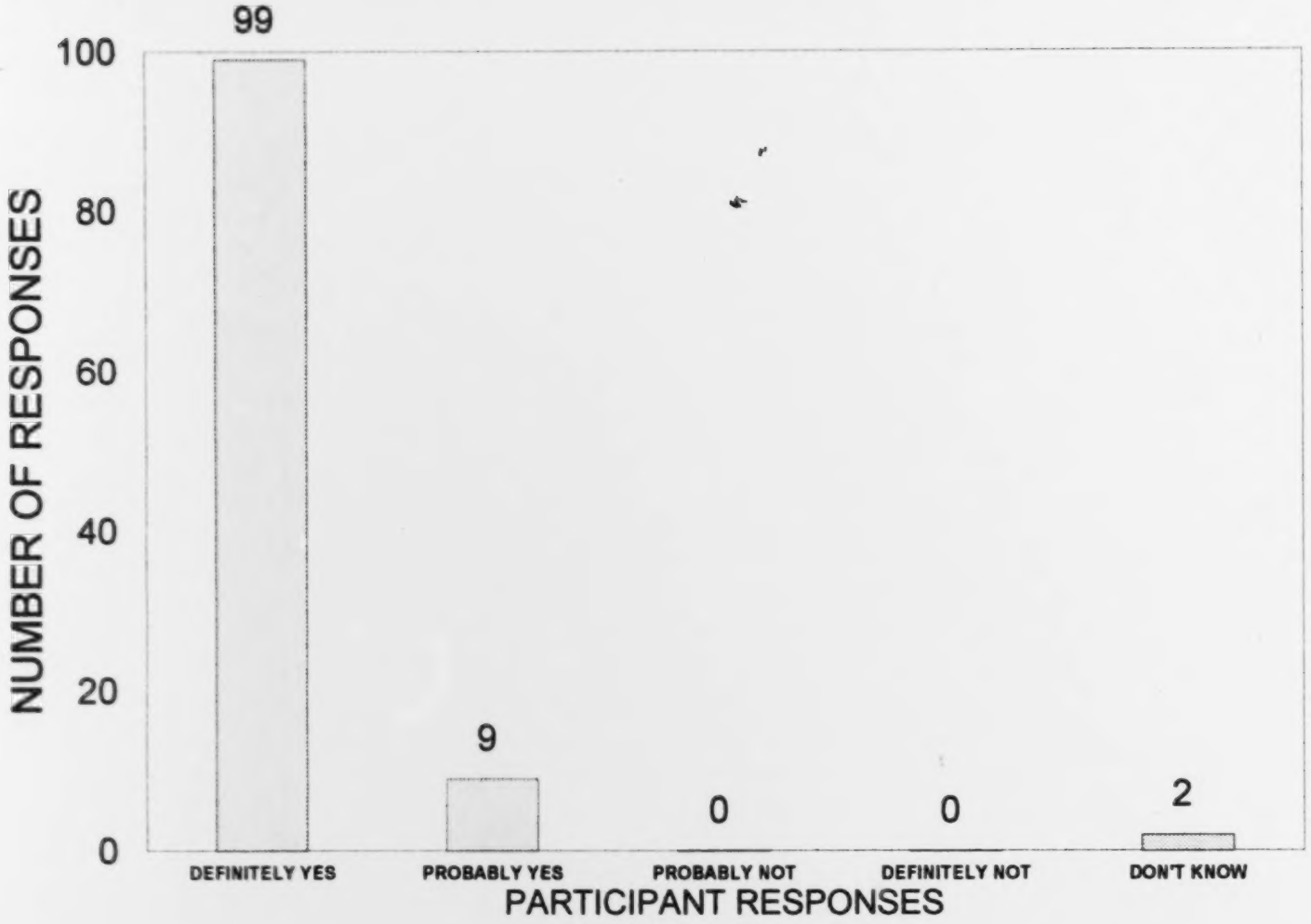
WAS THE INSTRUCTOR WELL INFORMED ABOUT THE MATERIAL PRESENTED IN CLASS?



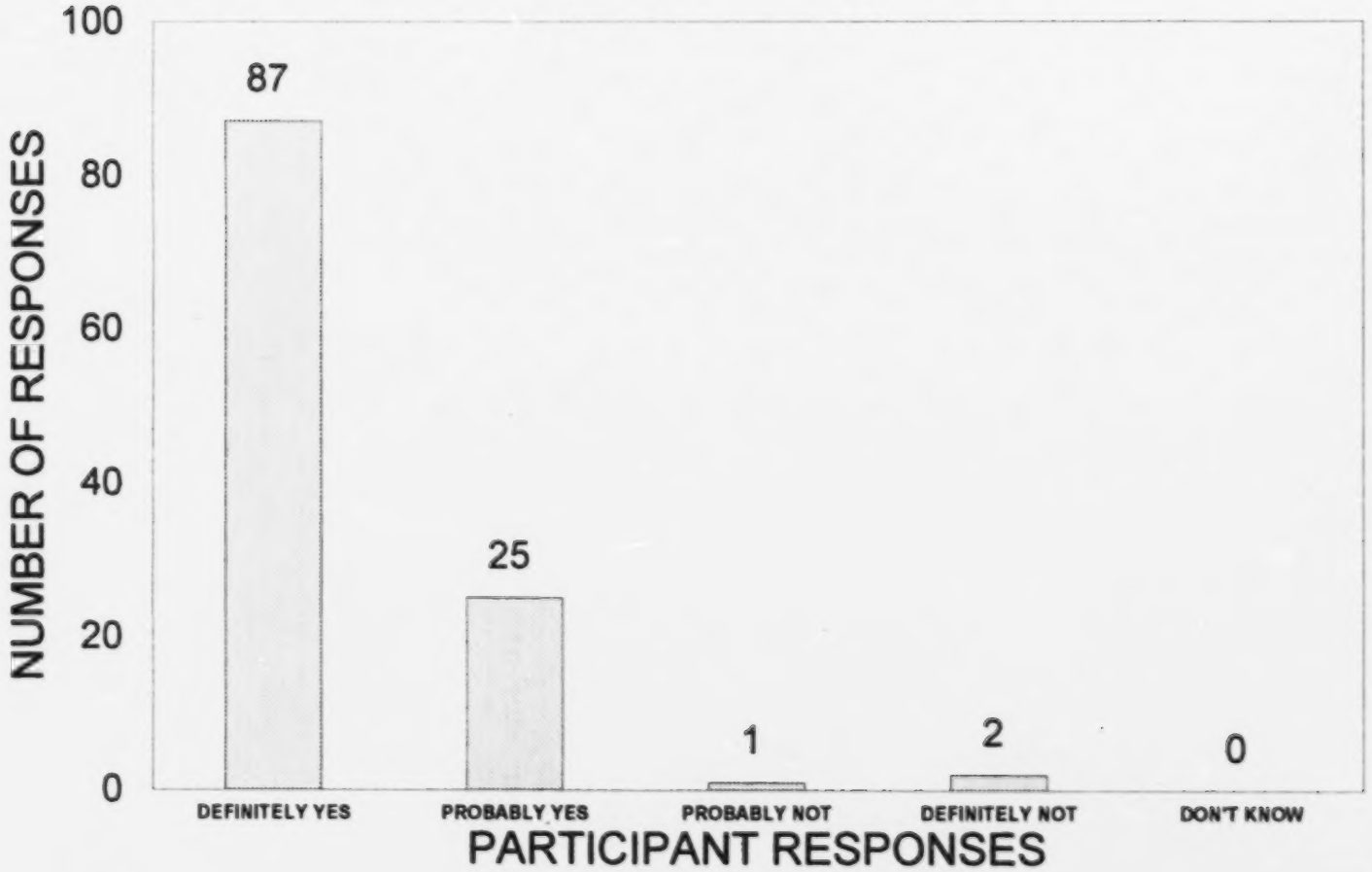
WAS THE INSTRUCTOR SENSITIVE TO STUDENTS?



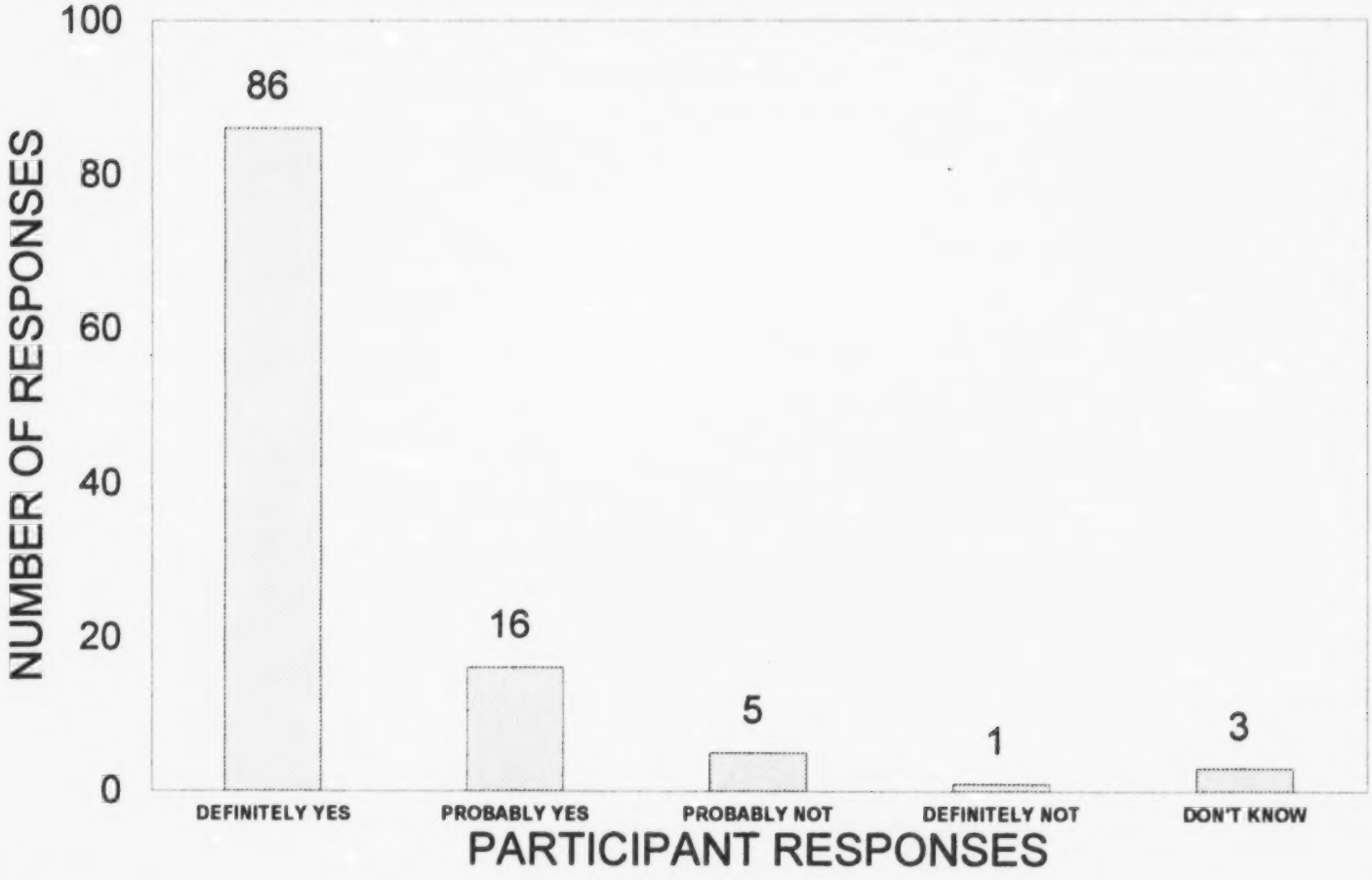
WAS THE INSTRUCTOR HELPFUL TO YOU?



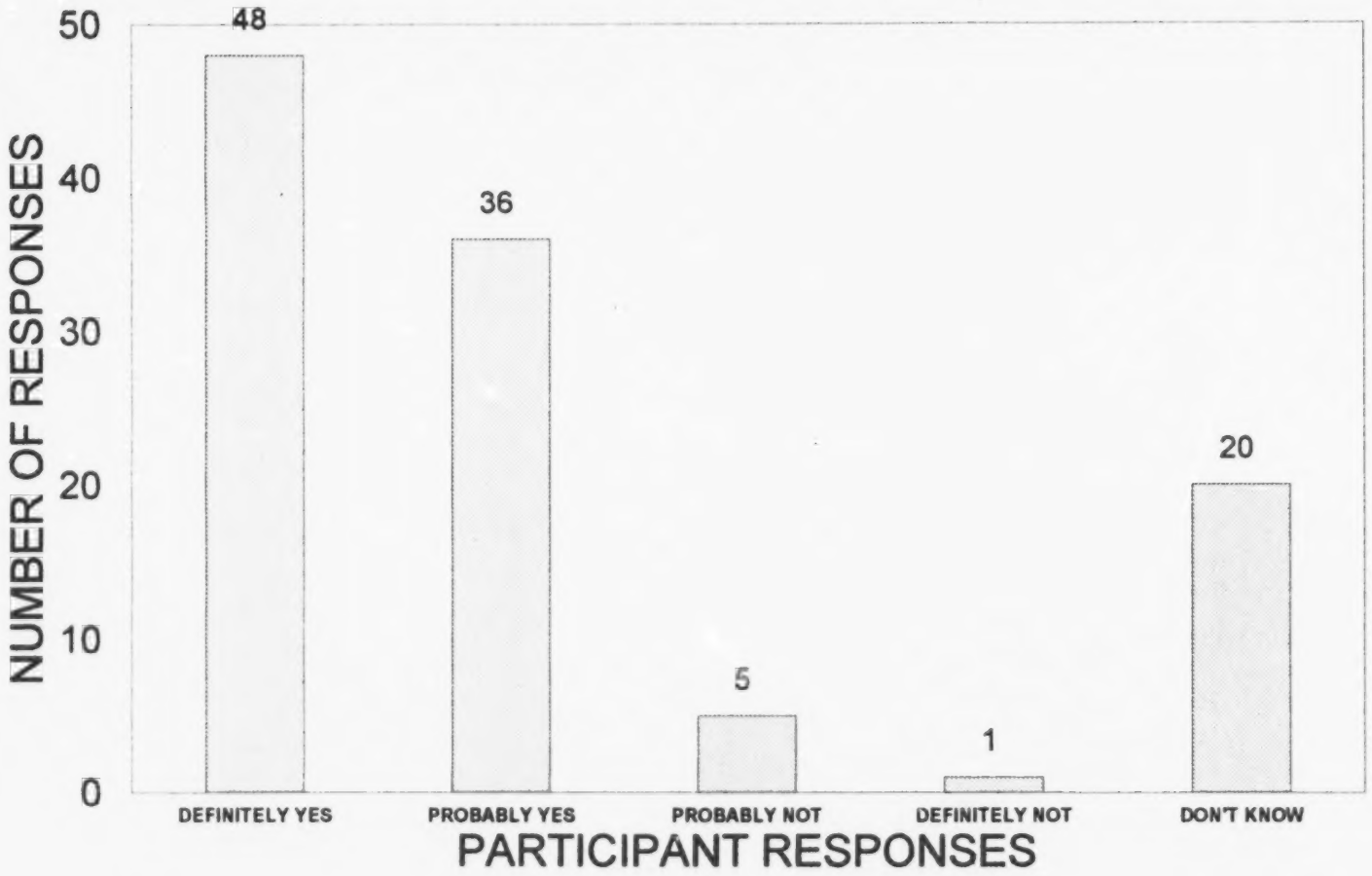
WERE THE METHODS OF TEACHING HELPFUL TO YOU?



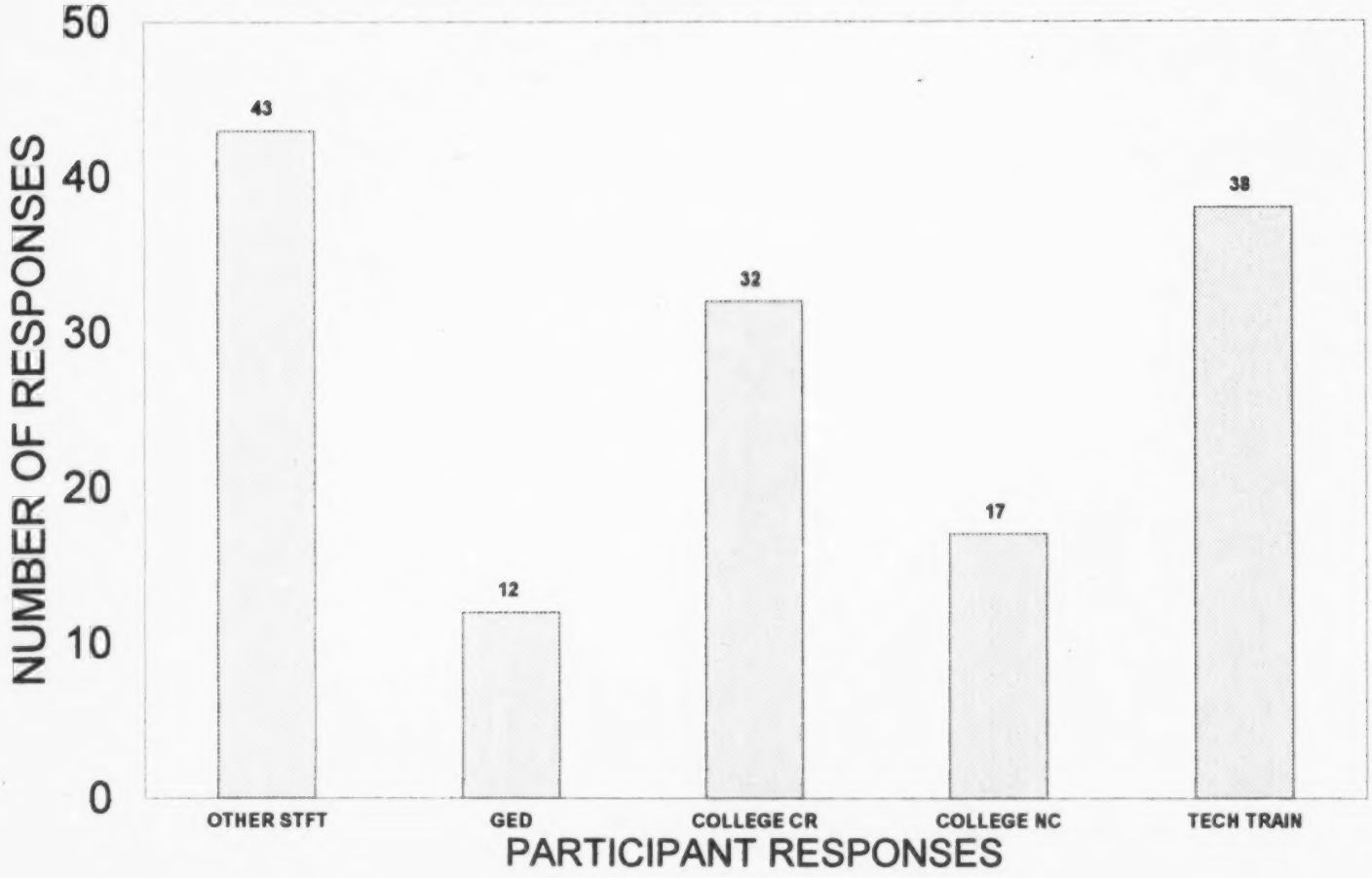
WOULD YOU RECOMMEND THIS CLASS TO A CO-WORKER?



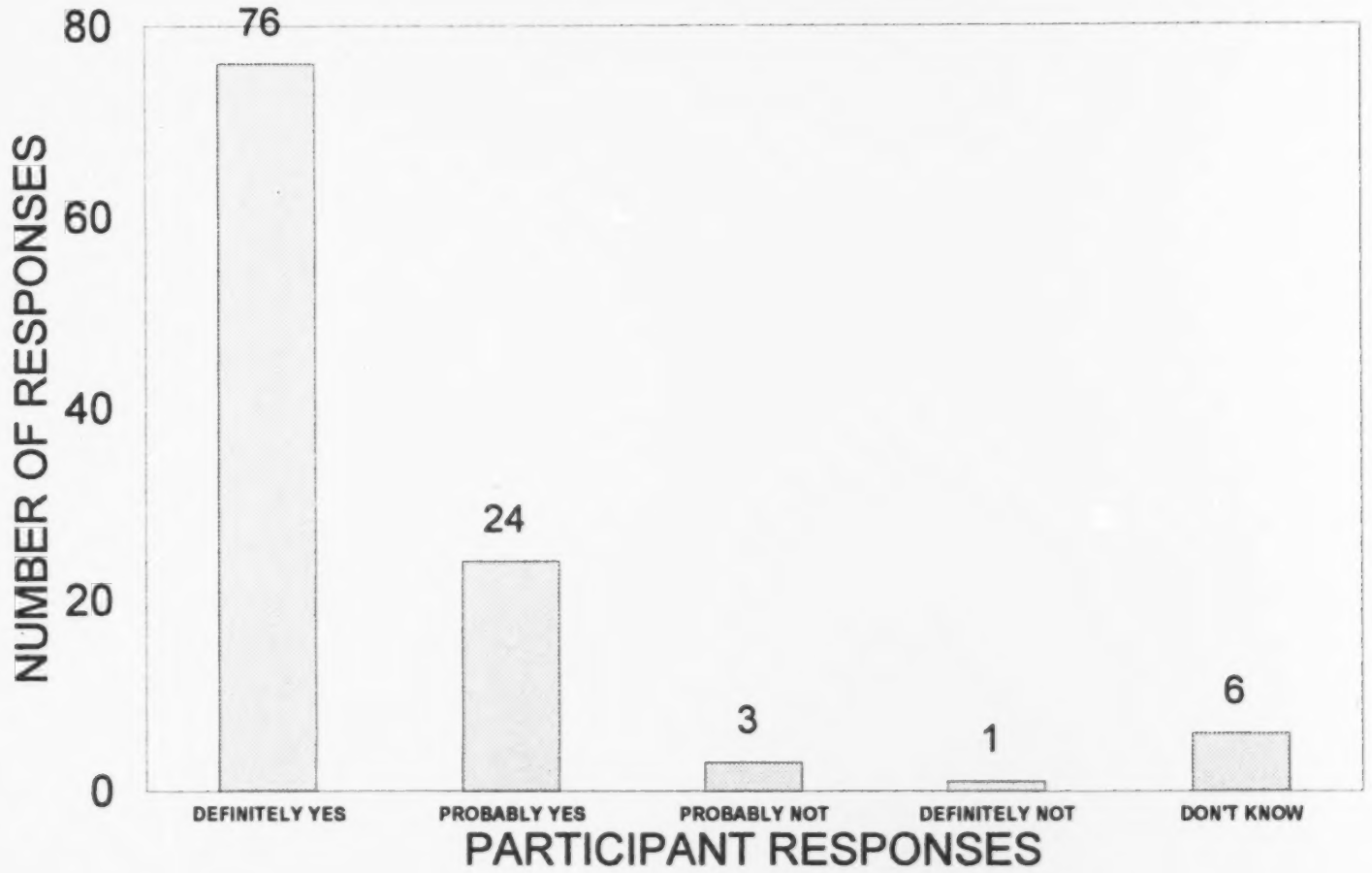
HAVING TAKEN THIS CLASS, DO YOU INTEND TO TAKE OTHER CLASSES?



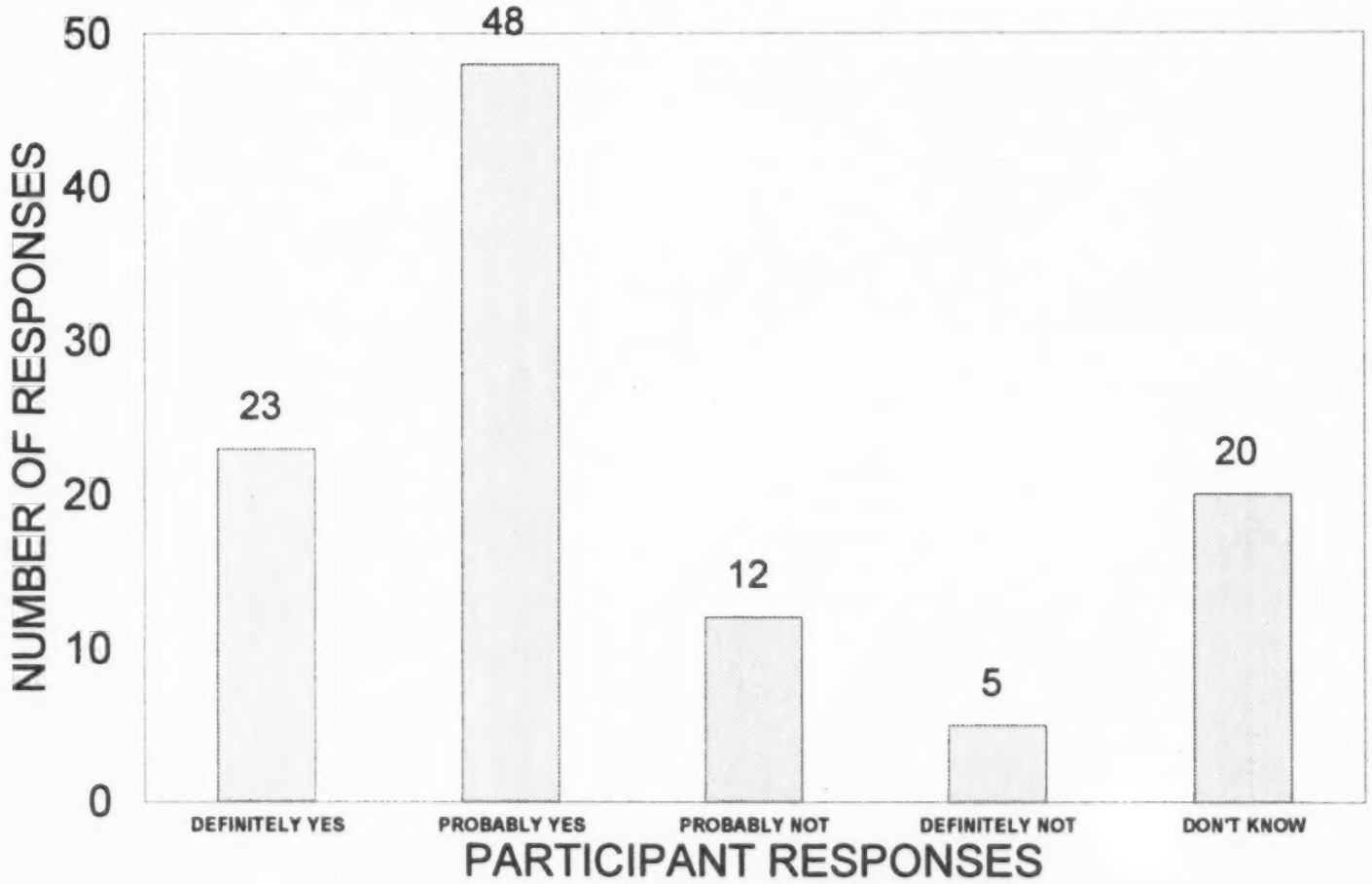
WHAT OTHER TYPE OF CLASSES DO YOU INTEND TO TAKE?



WOULD YOU TAKE ANOTHER ADULT ED. CLASS AT THIS LOCATION?



WOULD YOU TAKE ANOTHER ADULT ED. CLASS AT A DIFFERENT LOCATION?



ADDITIONAL PARTICIPANT COMMENTS

"THE CLASSES BENEFITED BY MAKING YOU HAVE THE ABILITY TO UNDERSTAND THE JOB ORDERS BETTER, TO BETTER INTERPRET WHAT'S WRITTEN ON PAPER, SO THAT YOU CAN MORE ACCURATELY FOLLOW THROUGH ON THE FUNCTION THAT'S REQUIRED."

"I WOULD LIKE TO THANK YOU FOR THIS TIME TO LEARN"

"EVERYTHING I LEARNED IN CLASS WAS VALUABLE"

"I REALLY ENJOYED THIS COURSE. IT HELPED MY MATH SKILLS AND A LOT MORE"

"I LOOKED FORWARD TO COMING TO CLASS EACH WEEK"

"I HAD A GOOD TIME IN THIS CLASS. AND IT HAS MADE A DIFFERENCE IN MY LIFE. THANK YOU!"

"FOR THE FIRST TIME IN MY LIFE, I HAVE COMPLETED SOMETHING. I AM SO PROUD."

"I WISH I HAD DONE THIS YEARS AGO. "

"MY SON IS GETTING HIS PH.D AND HE IS SO PROUD OF ME FOR DOING THIS. WE ARE BOTH IN SCHOOL AT THE SAME TIME."

"IF THIS HAD NOT BEEN HERE AT MY COMPANY, I WOULD NEVER HAVE DONE THIS. IT WAS SO CONVENIENT."

"IF ALL OF MY TEACHERS HAD BEEN AS NICE AND AS PATIENT AS MR. REANEY, I WOULD HAVE LEARNED THIS IN SCHOOL A LONG TIME AGO."

"I WOULD LIKE TO THANK MY COMPANY, CATONSVILLE COMMUNITY COLLEGE, MR. JONES, AND THE FEDERAL GOVERNMENT FOR GIVING ME THIS OPPORTUNITY."

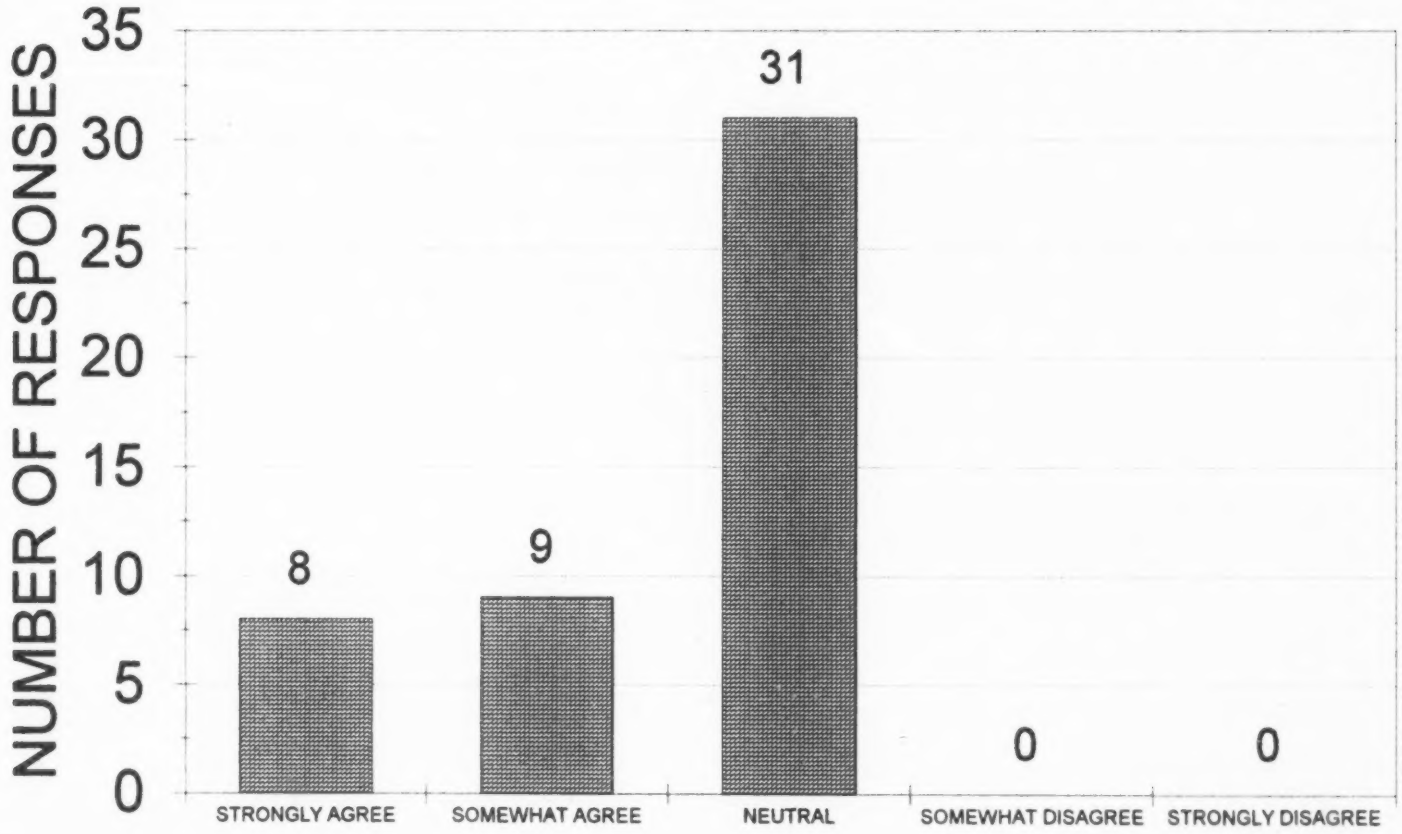
"I NEVER THOUGHT MATH COULD BE SO MUCH FUN."

Another of the evaluation goals of ***Skills Today for Tomorrow*** was to measure as objectively as possible work-based outcomes of the program. Unfortunately, the participating companies did not have individual productivity measures in place. Therefore, CCC conducted a supervisor survey for all participants. **[SEE EXHIBIT L]** Surveys with participant names were sent to each supervisor at every site. The supervisors rated their workers in the areas of:

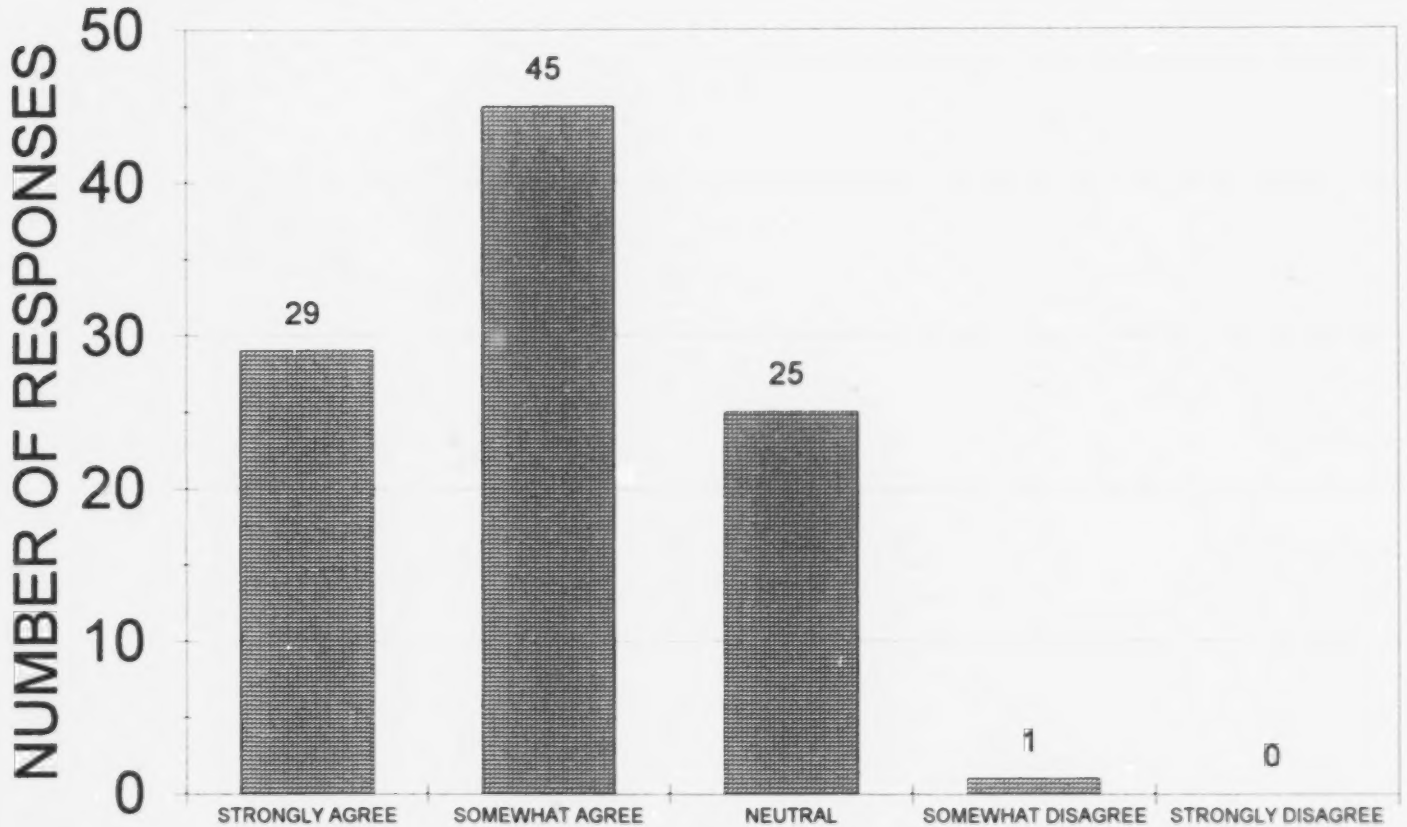
productivity
attendance
safety
self-esteem
communications

The return rate of these surveys was 28%. Graphs of the results follow on pages 57-61. Some of the highlights of the supervisor comments included on these reports can be found on page 62.

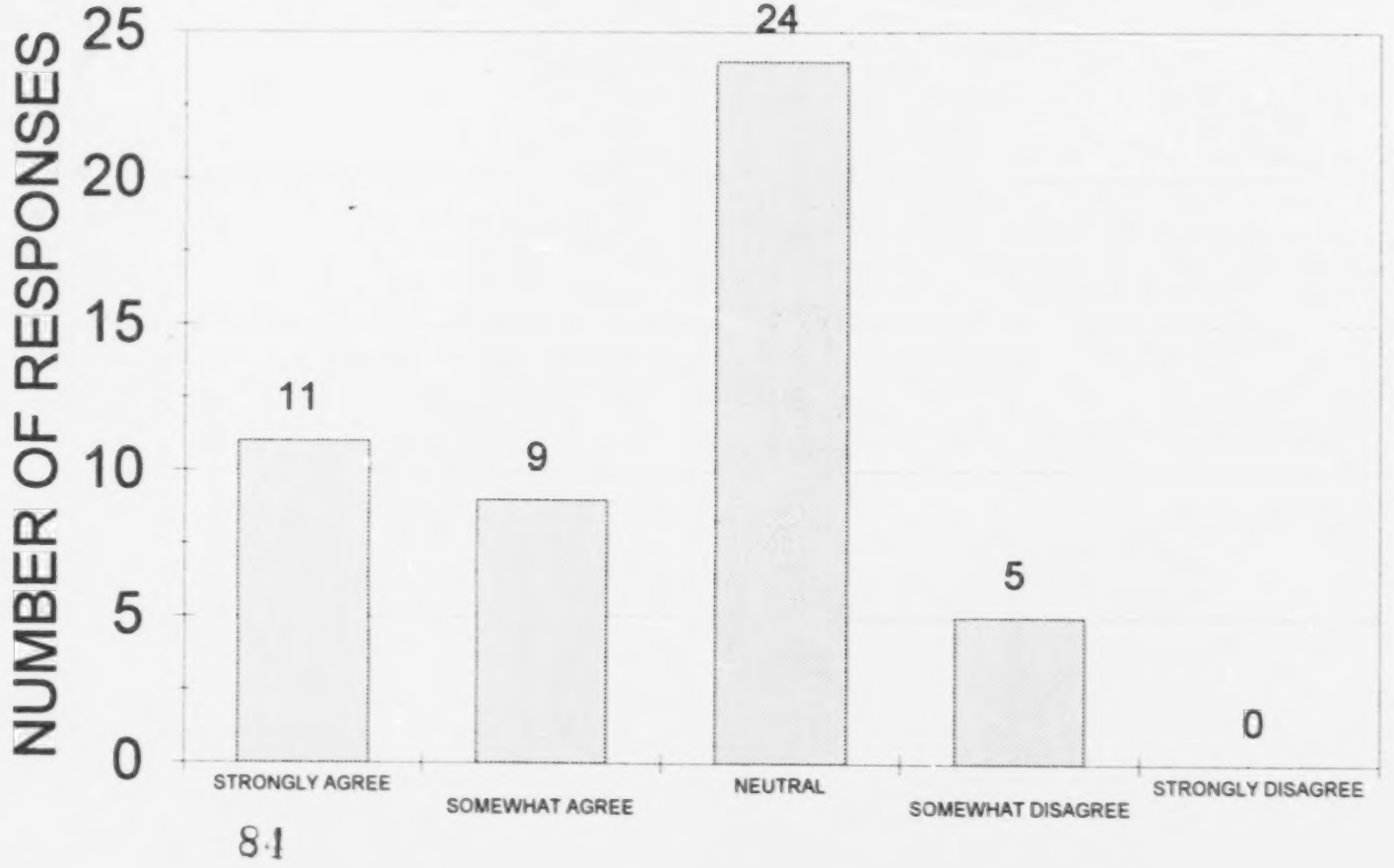
SUPERVISOR SURVEY
WORKER SAFETY IMPROVED



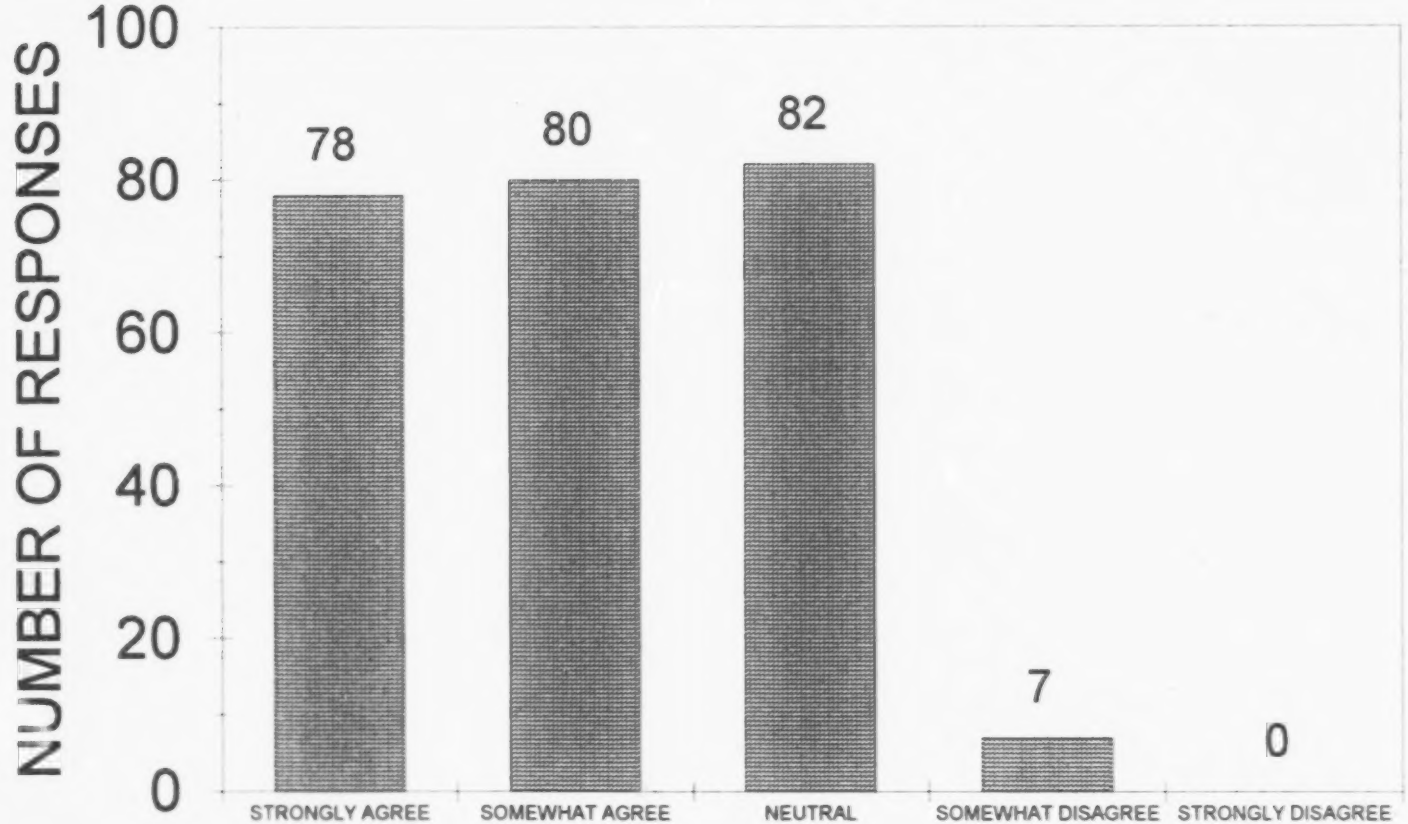
SUPERVISOR SURVEY
ABILITY TO COMMUNICATE EFFECTIVELY



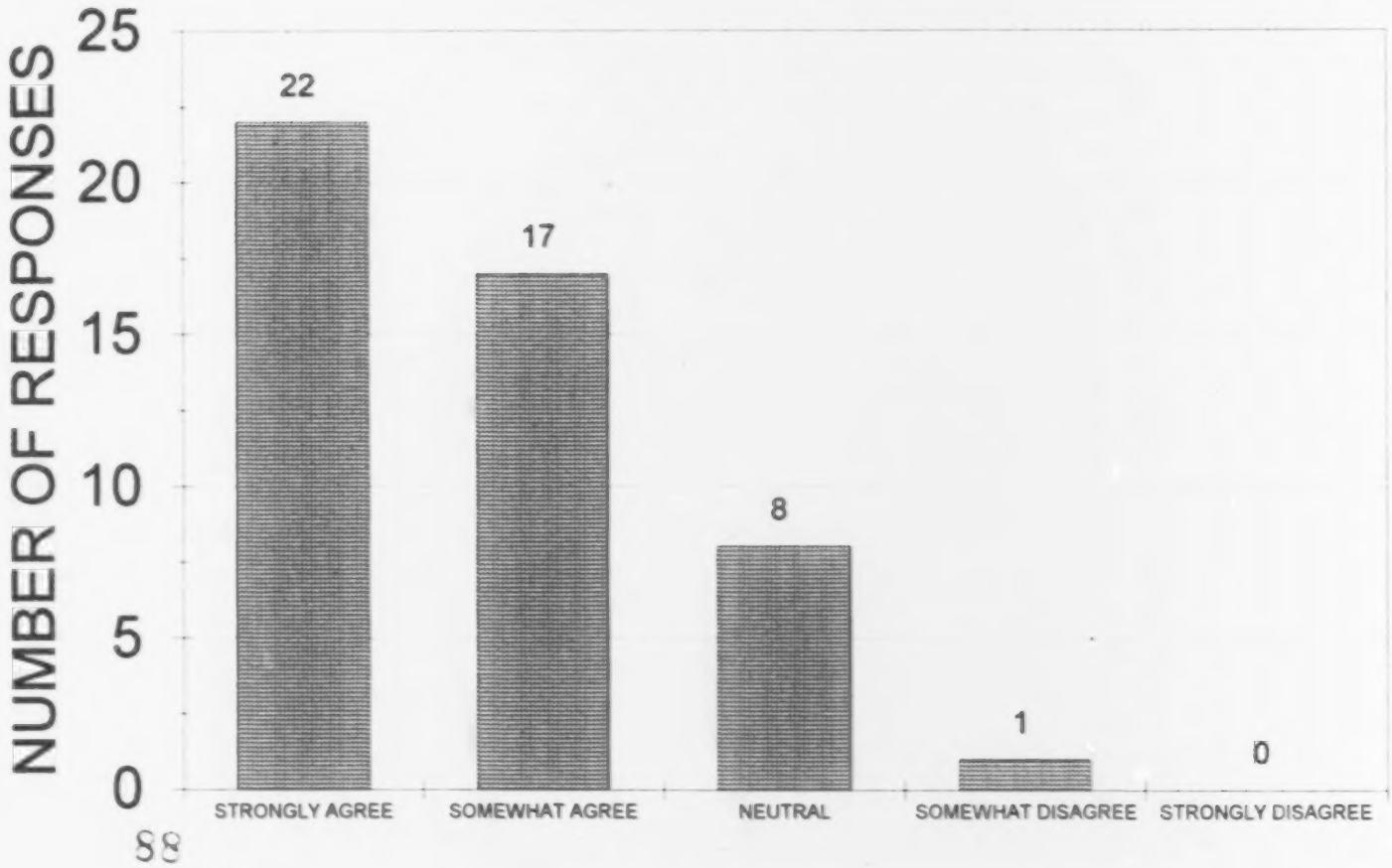
SUPERVISOR SURVEY
IMPROVED ATTENDANCE



SUPERVISOR SURVEY
WORKER PRODUCTIVITY INCREASED



SUPERVISOR SURVEY
INCREASE WORKER SELF-ESTEEM



SUPERVISOR SURVEY - COMMENT HIGHLIGHTS

... R. has been promoted to folding department shift leader since he completed the course.

... D. was promoted to Adjuster Trainee after the course.

... B. is now a supervisor! He is doing a great job!

... B. never thought she'd have the chance to take any classes; really feels this helped her personal life as well.

... Because of T's improved skills, he has recently been promoted to a supervisor position.

... Since taking this course, J. has gone on to take and complete a course at a community college in business, and has been promoted to supervisor.

... Since taking this course, S. has improved her communication efforts with other employees to the extent that she has become a Senior Technician to answer questions for other employees.

.... C. had no communication confidence. He even wanted to drop the course. But the instructor worked with him to overcome his fears and he is much better off as a result.

.... R. has been promoted into a cost estimating job since taking the classes.

.... After attending these classes, I've seen several differences in the employees. The biggest difference is their attitude. They seem to come down here with a great attitude after they have been up there. They seem to get a kick out of this.

.... It is truly one that enables the employee to better himself, absolutely and truly. And in my way of thinking, if the employee betters themselves, the better the company and for a real partnership.

.... It is a win-win situation for all of us. We are getting a better group of employees

who can better understand work orders and instructions, and therefore improve our productivity and quality.

..... The self-esteem of those employees who participated just rose tremendously.

.... Our employees are doing their own math, they are helping each other with their math, and it's an opportunity for them to mix with everyone else and really share information.

DISSEMINATION

Dissemination, though not originally expected to be a primary outcome of this project, indeed took on a major role. Both the education community and the graphic arts industry displayed great interest in the project. Interestingly, greater interest was in "how to" rather than "what happened."

Both of the national printing trade associations were very interested in the project. The National Association of Printers and Lithographers (NAPL) was interested in the project since ***Skills Today for Tomorrow*** used their WorkPLACE^{R} curriculum for part of the instruction. The project was frequently mentioned in their publicity regarding WorkPLACE^{R}. Printing Industries of America (PIA) is the parent organization of PIM, one of the partners in the project. PIA is beginning to initiate workplace literacy programs for its members.

As a result of the dissemination efforts of this project, the Project Director received numerous telephone consulting requests from printing companies in other parts of the country seeking assistance in establishing work-based education programs in their firms. Printing companies in California, Ohio, Colorado, Massachusetts, Washington, D.C., Virginia, Illinois, Florida, and Pennsylvania, among others, sought assistance from ***Skills Today for Tomorrow***.

The Project Director presented the following workshops, seminars, and discussions regarding ***Skills Today for Tomorrow*** during the life of the project:

National Council of Community Services and Continuing Education, Annual Conference, Baltimore, Maryland, October 1993.

American Association of Adult and Continuing Education Annual Conference, Dallas, Texas, November 1993.

International Reading Association North American Conference on Adult and Adolescent Literacy, Washington, DC, February 1994.

Delaware Association for Adult and Continuing Education Annual Conference, Dewey Beach, Delaware, March 1994

Network Consortium for Two Year Colleges in Workforce Development Annual Conference, Baltimore, Maryland, April 1994.

Maryland Association for Adult, Community, and Continuing Education Annual Conference, Annapolis, Maryland, April 1994.

National Council for Community Services and Continuing Education Annual Conference, Ann Arbor, Michigan, October 1994.

League for Innovation in Community Colleges Workforce Development Conference, San Diego, California, February, 1995

Delaware Association for Adult and Continuing Education, Annual Conference, Dewey Beach, Delaware, March 1995.

Network Consortium for Two-Year Colleges Annual Workforce Development Conference, Nashville, Tennessee, April 1995.

The final report and copies of the curriculum will be on file with the U.S. Department of Education in Washington, D.C. and at the Curriculum Coordination Center in Springfield, IL.

SITE SUMMARY - AUTOMATED GRAPHICS SYSTEMS

LOCATION	Automated Graphic Systems 188 DeMarr Road White Plains, Maryland 20695
SITE COORDINATOR	Mr. Larry Schindel Director of Human Resources
CLASSES HELD	Level I: 2 sections Level II: Critical Thinking/Problem Solving - 1 section
INSTRUCTORS	Jim Cecil Barbara Allen
EMPLOYEE ASSESSMENTS	63
EMPLOYEE ENROLLMENTS	15

SITE SUMMARY - MCGREGOR PRINTING CORPORATION

LOCATION	McGregor Printing Corporation 1241 New Windsor Road Westminster, Maryland 21158
SITE COORDINATOR	Mr. Gene Plowman Ms. Patricia Stonesifer
CLASSES HELD	Level I: 2 sections Level II: Workplace Communications - 1 section Critical Thinking/Problem Solving - 1 section
INSTRUCTORS	Mary Jo Winter
EMPLOYEE ASSESSMENTS	77
EMPLOYEE ENROLLMENTS	34

SITE SUMMARY - ADVANTAGE BOOKBINDING COMPANY

LOCATION	Advantage Bookbinding Company 85 Dover Road Glen Burnie, Maryland 21060
SITE COORDINATOR	Ms. Christine Webbert Mr. Bob Goad
CLASSES HELD	Level I: I section Level II: Critical Thinking/Problem Solving - I section
INSTRUCTORS	Daryl Reaney Donna Dzuiban
EMPLOYEE ASSESSMENTS	32
EMPLOYEE ENROLLMENTS	21

SITE SUMMARY - CATTERTON PRINTING

LOCATION	Catterton Printing 24 Industrial Park Drive Waldorf, Maryland 20602
SITE COORDINATOR	Mr. David Thornbury
CLASSES HELD	Level I: 1 section Level II: Critical Thinking/Problem Solving- 1 section
INSTRUCTORS	Jim Cecil Barbara Allen
EMPLOYEE ASSESSMENTS	33
EMPLOYEE ENROLLMENTS	20

SITE SUMMARY - DICK WILDES PRINTING COMPANY

LOCATION	Dick Wildes Printing Company No. I Calvert Street La Plata, Maryland 20646
SITE COORDINATOR	Mary Ann Scott
CLASSES HELD	Participants from this company attended classes at Automated Graphics Services
EMPLOYEE ASSESSMENTS	7
EMPLOYEE ENROLLMENTS	2

SITE SUMMARY - GARAMOND/PRIDEMARK PRESS, INC.

LOCATION	Garamond/Pridemark Press Inc. 2717 Wilmarco Avenue Baltimore, Maryland 21223
SITE COORDINATOR	Mr. Brad Altman Mr. Ralph Olson*
CLASSES HELD	Level I: 1 section
INSTRUCTORS	Mary Gainer
EMPLOYEE ASSESSMENTS	7
EMPLOYEE ENROLLMENTS	7

*Replacement

SITE SUMMARY - OLES ENVELOPE CORPORATION

LOCATION	Oles Envelope Corporation 532 East 25th Street Baltimore, Maryland 21218
SITE COORDINATOR	Ms. Rosalind Grossman Ms. Vicki Young*
CLASSES HELD	Level I: 2 sections Level II: Workplace Communications - 2 section Critical Thinking/Problem Solving - 1 section Workplace Math - 2 sections
INSTRUCTORS	Joan Feeney Connie Smith LeRoy Jones
EMPLOYEE ASSESSMENTS	54
EMPLOYEE ENROLLMENTS	42

SITE SUMMARY - OSCAR T. SMITH COMPANY

LOCATION	Oscar T. Smith Company P. O. Box 13027 Baltimore, Maryland 21203
SITE COORDINATOR	Mr. Jerry Wilson Vice President
CLASSES HELD	Level I: 1 section Level II: Workplace Math - 1 section
INSTRUCTORS	Linda A. Metz
EMPLOYEE ASSESSMENTS	18
EMPLOYEE ENROLLMENTS	10

SITE SUMMARY - YORK GRAPHIC SERVICES

LOCATION	York Graphic Services 3600 W. Market Street York, Pennsylvania 17404
SITE COORDINATOR	Ms. Sharon Mitzel Director of Human Potential
CLASSES HELD	Level I: 1 section Level II: Workplace Communications - 2 section Critical Thinking/Problem Solving - 1 section Workplace Math - 1 section
INSTRUCTORS	Ruth Rothingshofer George Mierisch Tom Diffenbach Victor Zolenski
EMPLOYEE ASSESSMENTS	187
EMPLOYEE ENROLLMENTS	20

SITE SUMMARY - DIRECT MARKETING ASSOCIATES

LOCATION	Direct Marketing Associates 4545 Annapolis Road Baltimore, Maryland 21227
SITE COORDINATOR	Mr. Jim Bannon Director of Human Resources
CLASSES HELD	Level I: 4 sections
INSTRUCTORS	Daryl Reaney Leroy Jones
EMPLOYEE ASSESSMENTS	93
EMPLOYEE ENROLLMENTS	49

Classes will be continuing at DMA after the grant funding has ended.

SITE SUMMARY - LANDMARK COMMUNITY NEWSPAPERS OF MARYLAND, INC.

LOCATION	Landmark Community Newspapers of Md., Inc. P. O. Box 346 Westminster, MD 21157
SITE COORDINATOR	Ms. Paige Molder
CLASSES HELD	Level II: On the Job Math - I section Critical Thinking/Problem Solving - I section
INSTRUCTORS	Mary Jo Winter
EMPLOYEE ASSESSMENTS	59
EMPLOYEE ENROLLMENT	11

RECOMMENDATIONS

1. The premise of this project was to train other community college staff to implement their own workplace literacy programs. This proved to be a very difficult process. One of the primary reasons for this was due to lack of strong commitment at the partner colleges. All of them had originally committed to the project in June 1992. By the time the project was funded and implemented in May 1993, the contact person (and individual charged with the responsibility for the project) had changed at two of the three colleges. This forced us to begin again getting the college's buy-in. While we did get commitment from each of the partner colleges, the responsibilities were assigned to an already overloaded coordinator or director in the business and industry unit at each college. Since the impact of the program for those colleges was in terms of learning "how to" and in industry contacts, this project was not given the top priority for these coordinators. In the future, I would recommend a project like this be managed by one college and sub-contracted to the others, rather than a configuration like we used. Contractual obligations and income would enhance the commitment of the other colleges.

2. Small businesses continue to be challenging in projects such as this one. Companies with 20-50 employees simply cannot release sufficient numbers of employees to attend classes at one time. Perhaps the use of centralized learning centers where a number of companies can send their workers will help with this problem. However, in most of the printing companies we worked with, workers stated they would not attend classes if they were not offered at their worksites. Increased use of distance learning technologies might also be an effective solution.

3. Assessment continues to be a problem as well. Our efforts at developing a customized assessment took a great deal of time and yet did not yield an instrument that solves the problems of commercially produced standardized assessment instruments.

4. Greater consistency in reporting requirements and direction from the Department of Education would make it easier for projects to report results.

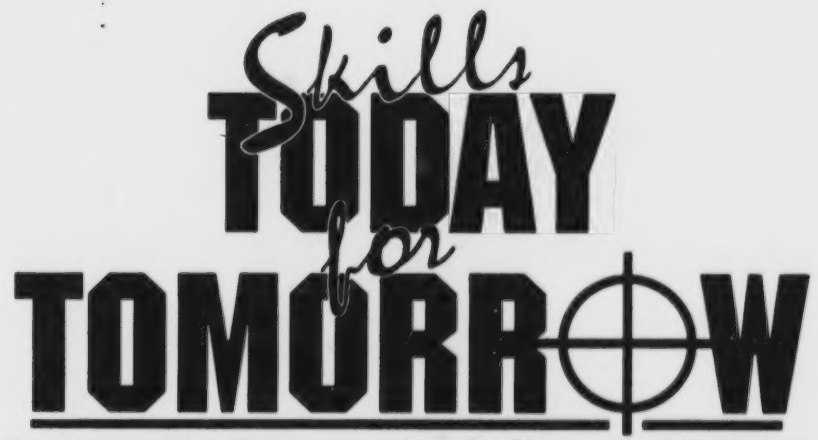
5. It is critical to remain in constant contact with other project directors of both current and prior-funded projects. This is probably the most valuable resource available to a project director. Most project directors are willing to consult with others trying to reach the same goals. In addition, there is a wealth of documents, forms, surveys, applications, and the like already developed. Struggling to re-invent the wheel is not an effective use of time.

6. It is essential to remove the "L Word" and its negative connotations from the program immediately. After the initial meetings with the Management Council, the word literacy was no longer used. The negative stigma attached to a literacy program is a deterrent not only to potential program participants, but employers are sometimes reluctant to admit there may be a literacy problem in their firms. The Council named this project ***Skills Today for Tomorrow*** to emphasize the need for training to meet future workplace demands. All references to the program were either "workplace skills enhancement" or "work-based education."

7. Be aware of "peak times" and "down times" of each partner in the project and plan accordingly. It is a good idea to build in one or two skip dates when scheduling classes. This allows flexibility if a rush job comes in, the bloodmobile is using the classroom one day, or a plant meeting forces you to cancel classes.

8. Put all reporting requirements, surveys, and other site administration tasks in writing prior to the start of working with companies. We discussed with and each company site coordinator agreed to complete all necessary paperwork. However, it has been very difficult and very time consuming to collect this data from the companies. Some have simply ignored our requests, despite repeated attempts to collect data.

EXHIBIT A



Catonsville Community College & PIM&SP
A Partnership For The Future.

Laura E. Weidner, Project Director
Catonsville Community College
(410) 455-4501

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

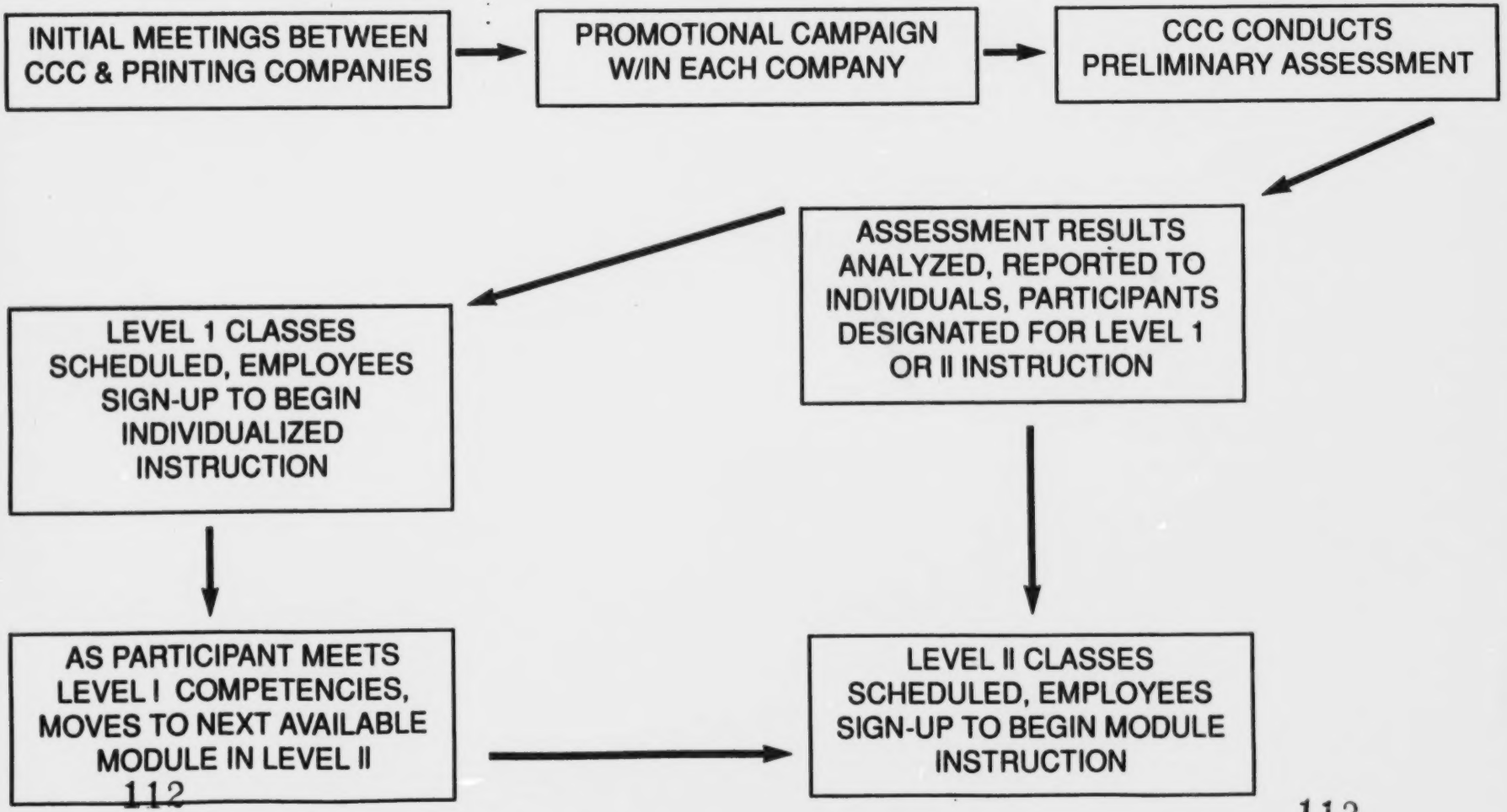
1. OVERVIEW

- 18 month, $385,000 U.S. Department of Education grant.
- Addresses the industry need for skilled labor.
- Designed to improve workers' basic skills.
- Incorporates two levels of instruction.
- Instruction individualized to meet worker and company needs.
- Instruction generally takes place on-site.
- Curriculum is printing industry-specific.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

2. PROCESS


INITIAL MEETINGS BETWEEN CCC & PRINTING COMPANIES
PROMOTIONAL CAMPAIGN W/IN EACH COMPANY
CCC CONDUCTS PRELIMINARY ASSESSMENT
ASSESSMENT RESULTS ANALYZED, REPORTED TO INDIVIDUALS, PARTICIPANTS DESIGNATED FOR LEVEL 1 OR II INSTRUCTION
LEVEL 1 CLASSES SCHEDULED, EMPLOYEES SIGN-UP TO BEGIN INDIVIDUALIZED INSTRUCTION
AS PARTICIPANT MEETS LEVEL I COMPETENCIES, MOVES TO NEXT AVAILABLE MODULE IN LEVEL II
LEVEL II CLASSES SCHEDULED, EMPLOYEES SIGN-UP TO BEGIN MODULE INSTRUCTION

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

3. CURRICULUM

LEVEL I CURRICULUM

- Includes further diagnostic assessment of participants
- Instructional team will conduct basic skills task analysis of jobs
- Instructional team will develop job-specific teaching materials
- Integrated curriculum of reading, writing, and math
- Some commercially published materials may be used to supplement curriculum

LEVEL II CURRICULUM

- Three components:

✓ *On-The Job Math:* apply math concepts including ratio, estimation, and measurement to printing industry situations

✓ *Critical Thinking & Problem Solving:* Learn systematic problem solving applicable to actual job situations

✓ *Workplace Communications:* Practice effective verbal & non-verbal techniques; also listening, reading, and writing skills on-the-job.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

4. COMPANY BENEFITS

- Maximized training dollars at minimum employer cost.
- Reduced spoilage due to improved worker ability to perform tasks.
- Improved worker attendance, attitude, & performance.
- Improved overall technical readiness of firm.
- Positive image of concerned management committed to employees and their future.
- Positive public image as employee-oriented firm.
- Basis established for future training programs.
- More versatile and trainable work force.
- Increased stability in the work force.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

5. WORKER BENEFITS

- Improved skills in reading, writing, math, problem-solving, and communications.
- Enhanced self-esteem leads to pride in work.
- Opportunity to improve promotion possibilities.
- Better attendance, attitude, & performance at work.
- Improved skills toward personal and job goals.
- Increased flexibility in dealing with new technologies.
- Free training in basic skills as preparation for future education.
- Greater self-confidence heightens willingness to adapt to changing job demands.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

6. EDUCATION PARTNERS

- Plan and direct program.
- Assist with promotional efforts.
- Develop new curricula & customize existing curricula for each site.
- Conduct employee recruitment sessions.
- Conduct on-site assessments.
- Schedule classes and provide instruction in the most appropriate time frame and setting.
- Maintain necessary record keeping to satisfy grant requirements.
- Evaluate program success, both formative and summative.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

7. BUSINESS PARTNERS

- Work with education partners to plan program.
- Promote the program within the company.
- Assist project staff in identifying necessary worker competencies.
- Provide release time for employee recruitment, assessment, and instruction.
- Support employee involvement by exhibiting positive attitude/approach and by encouraging participation.
- Make the program available to any employee who demonstrates both interest and need.
- Provide facilities and some resources for the assessment and instructional activities.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

WORKPLACE SKILLS TRAINING BENEFITS

BENEFITS TO THE COMPANY AS A WHOLE:

- reduced spoilage, due to improved ability to perform tasks
- improved attendance, attitude, and performance of employees
- improves overall technical readiness of the firm
- enables firm to be proactive for future staffing needs
- positive image of concerned management committed to employees
- positive public image as enlightened, employee-oriented firm
- builds basis for future training programs
- builds a more versatile and trainable work force
- increased stability in the work force
- maximize training dollars with minimum cost due to grant

BENEFITS TO THE INDIVIDUAL EMPLOYEE:

- improved skills in reading, writing, math, problem solving
- enhanced self-esteem leads to sense of pride in work
- chance to improve promotion possibilities
- better attendance, attitude, and performance on the job
- improved skills apply to personal goals as well as job goals
- better equipped to deal with technology as it changes
- free training in basic skills as preparation for further education
- more self-confidence heightens willingness to adapt as job demands

Skills
TODAY
for
TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

Today's labor force does not meet our current needs, and our needs are increasing as technological change accelerates and foreign competition intensifies. Between 20 and 40 million adults today have literacy problems, making it difficult for them to be trained or retrained. One-half of all 18-year olds have failed to master basic language, mathematics, and analytic skills.

Secretary of Labor's Commission on Workforce Quality and Labor Market Efficiency, 1989.

THE SKILLS EMPLOYERS WANT

• Employers want employees who can learn the particular skills of an available job--who have *LEARNED HOW TO LEARN*.

• Employers want employees who will hear the key points that make up a customer's concerns *[LISTENING]* and who can convey an adequate response *[ORAL COMMUNICATIONS]*.

• Employers want employees who can think on their feet *[PROBLEM SOLVING]* and who can come up with innovative solutions when needed *[CREATIVE THINKING]*.

• Employers want employees who have pride in themselves and their potential to be successful *[SELF-ESTEEM]*; who know how to get things done *[GOAL-SETTING/MOTIVATION]*; and who have some sense of the skills needed to perform well in the workplace *[PERSONAL/CAREER DEVELOPMENT]*.

• Employers want employees who can get along with customers, suppliers or co-workers *[INTERPERSONAL AND NEGOTIATION SKILLS]*; who can work with others to achieve a goal *[TEAMWORK]*; who have some sense of where the organization is headed and what they must do to make a contribution *[ORGANIZATIONAL EFFECTIVENESS]*; and who can assume responsibility and motivate co-workers when necessary *[LEADERSHIP]*.

Workplace Basics: The Skills Employers Want, U.S.Department of Labor, Employment & Training Administration, 1989.

HUMAN RESOURCE DILEMMAS IN THE PRINTING INDUSTRY

• As an industry, we are replacing craft--which can be learned over a period of years--with technology that requires equally skilled workers but workers who can use tools like statistical quality control and system programming.

• Technology is changing the way we work. The expense of new technologies requires workers to be up and running faster.

• Our present workforce is aging and as a group, the people who will be replacing our retirees are less skilled in the basics.

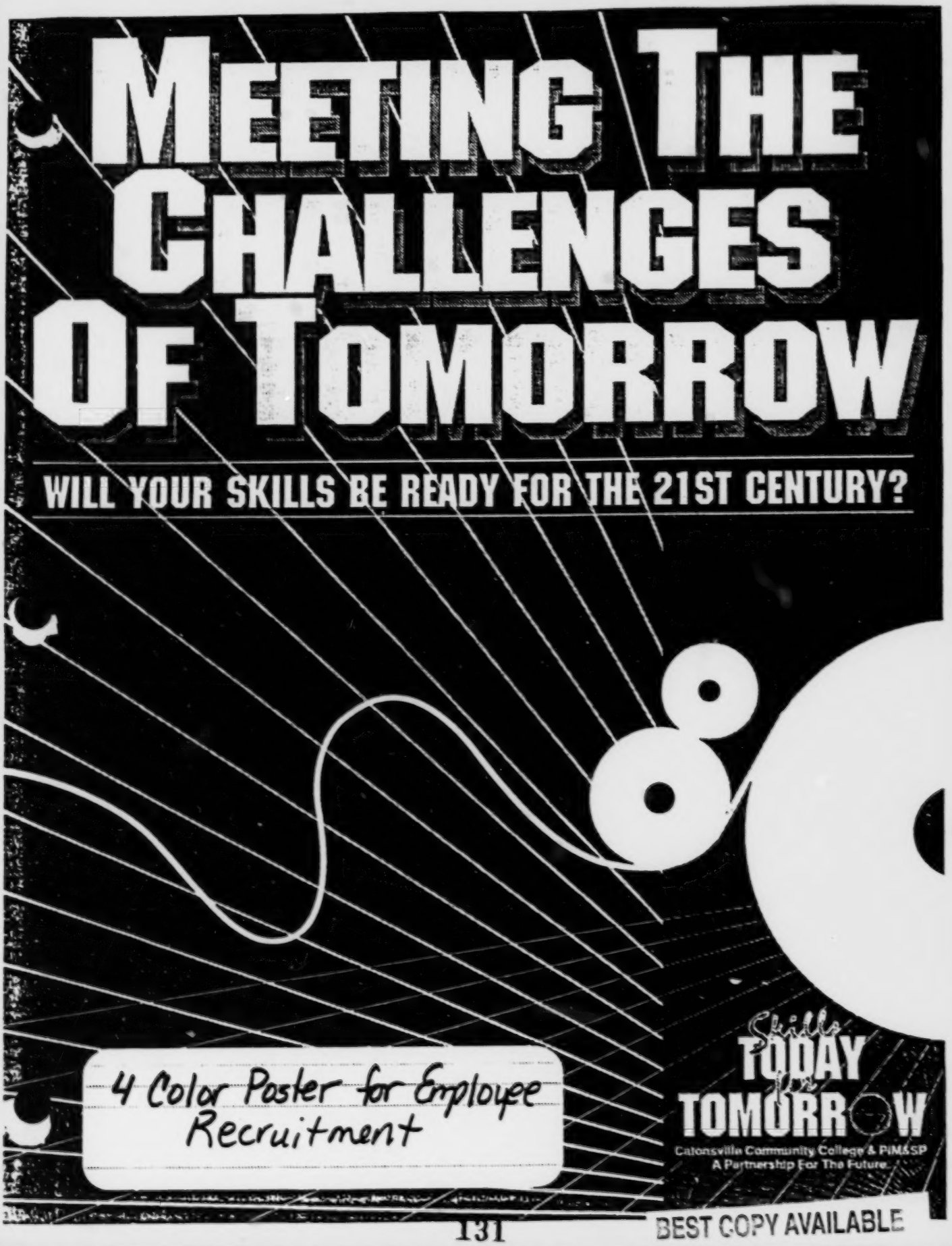
• The educational institutions traditionally responsible for basic skills instruction don't have the resources required to respond to the need.

Basic Skills in the Workplace: A Problem in the Graphic Arts, National Association of Printers and Lithographers, 1990.

America has no coherent employment and training policy for the majority of its workers. Little training of front-line workers occurs in the private sector. Most workers receive no education or training beyond high school.

America's Choice: High Skills or Low Wages, The Commission on the Skills of the American Workforce, 1990.

EXHIBIT B


MEETING THE CHALLENGES OF TOMORROW
WILL YOUR SKILLS BE READY FOR THE 21ST CENTURY?
Skills TODAY for TOMORROW
Catonsville Community College & PIM&SP
A Partnership For The Future

4 Color Poster for Employee Recruitment

BEST COPY AVAILABLE

WHAT WILL IT COST?

Funding is provided by a $240,500 U.S. Department of Education National Workplace Literacy Grant, through a partnership between Catonsville Community College and Printing Industries of Maryland (PIM).

Your commitment to a competitive workforce involves:

- Support and encourage employee involvement in the program
- Promote the program within the company
- Provide release-time for employees to be assessed and attend class
- Make the program available to any employee who demonstrates both interest and need
- Provide employee incentives

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

for more information contact:

Laura E. Weidner, Project Director
Catonsville Community College
110 Painter's Mill Road
Owings Mills, Maryland 21117

(301) 363-4111

The Problem:
THE YEAR 2000 IS UPON US.

- A nationwide survey by the National Association of Printers and Lithographers revealed:
  - "Over 60% of printing companies surveyed reported negative results due to employee's lack of basic skills, . . ."
  - "The respondents indicated that a lack of basic skills was evident in 41% of bindery workers, 38% of press workers, 30% of materials handling workers, 28% of prepress workers, and 19% of office personnel."
  - "As an industry, we are replacing craft—which can be learned over a period of years—with technology that requires equally skilled workers but workers who can use tools like statistical quality control and system programming."

    —Linda Stroker, "Basic Skills in the Workplace: A Problem in the Graphic Arts," National Association of Printers and Lithographers (NAPL) Special Report, April 1990.
- "Low level literacy is not really the critical problem. The problem is the inability of workers who already possess very basic skills to apply their skills to job situations and to cope with changing job requirements." —Jorie W. Philippi, *Literacy at Work*, Simon & Schuster Workplace Resources, New York, NY, 1991.

The Solution:
SKILLS TODAY FOR TOMORROW

Our special instructional team will assess your workforce to determine the need for basic skills training. We will design and implement a program to:

- Train employees in the basic math, communications, reading, writing, and problem solving skills they need to perform critical job tasks . . . using actual job materials.
- Teach transferable basic skills to enable your employees to apply their learning to any situation . . . you have employees who know how to learn.
- Customize basic skills training to meet the specific needs of *your* company by:
  - Identifying critical job tasks and problem areas
  - Performing basic skills analysis of job tasks
  - Assessing basic skills needs of your employees
  - Designing instructional program using job materials.

Program is backed by the reputation and integrity of Catonsville Community College.

WHO WILL BENEFIT?

Your Company:

- Reduces spoilage, due to improved ability to perform math, reading, and problem solving skills for critical job tasks.
- Improves technical readiness of the firm by developing a more versatile and trainable workforce.
- Creates a positive image of concerned management as committed to employees.

Your Employees:

- Develops employees' skills in reading, writing, math, problem solving, critical thinking as they are applied on the job.
- Equips employees to better manage new technology and changes in the workplace.
- Improves self-esteem, self-confidence, and adaptability to new job demands.

Skills TODAY for TOMORROW

Catonsville Community College & PIM&SP
A Partnership For The Future.

MEETING THE CHALLENGES OF TOMORROW

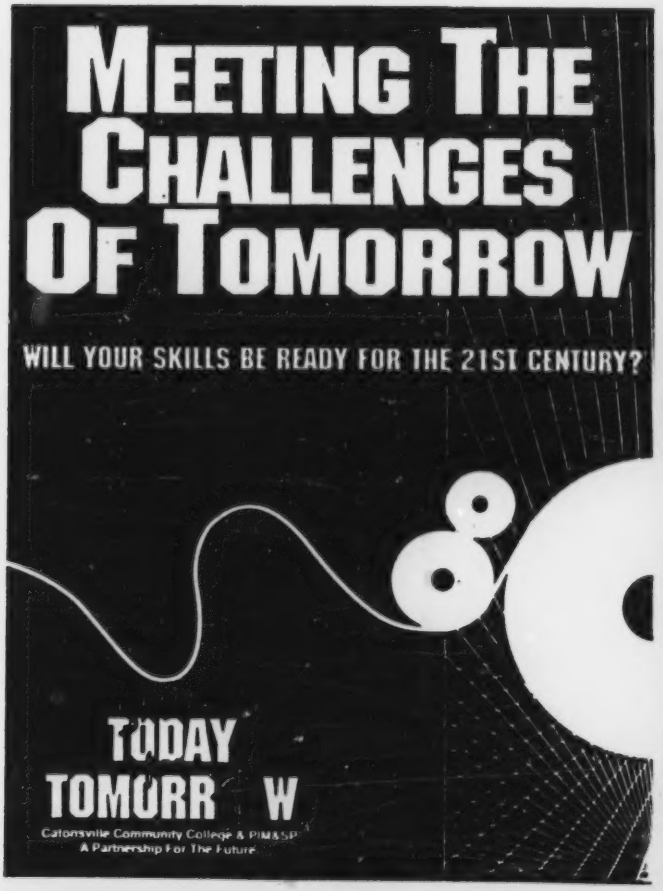
WILL YOUR SKILLS BE READY FOR THE 21ST CENTURY?

You are invited to attend one of the information sessions scheduled on May 7, 1991 at:

5 am - 7 am
1 pm - 3 pm
4 pm - 6 pm

Come and find out what **YOU** need to meet the challenges of tomorrow.

Call Pat Schlottenmeier at extension 296 and let her know which session you will attend.


MEETING THE CHALLENGES OF TOMORROW
WILL YOUR SKILLS BE READY FOR THE 21ST CENTURY?
TODAY
TOMORROW
Catonsville Community College & PIM&SP
A Partnership For The Future.

Skills TODAY for TOMORROW
Catonsville Community College & PIM&SP
A Partnership For The Future.

EXHIBIT C

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS READING - FORM 31 A

STFT READING COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11
CASAS	ITEMS	VOCAB	ALPHA	FACT	DIRECTN	SEQUEN	INDEX	GRAPHS	DIAGRM	SAFETY	ACCIDNT	EQUIPMT
CLOCK	1											
BUS	2											
NUMBERS	3											
COINS	4											
PICTURE	5											
AD	6											
NUMBERS	7											
APPT.	8											
MAP	9											
SIGN	10											
PICTURE	11											
SIGNS	12											
SIGNS	13											
MAP	14											
MAP	15											
CALENDAR	16											
CALENDAR	17											
ENVELOPE	18											
ENVELOPE	19											
PICTURE	20											
COINS	21											
AD	22											
DIRECTIONS	23											
DIRECTIONS	24											

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS READING - FORM 32 A

STFT READING COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11
CASAS	ITEMS	VOCAB	ALPHA	FACT	DIRECTN	SEQUEN	INDEX	GRAPHS	DIAGRM	SAFETY	ACCIDNT	EQUIPMT
CLOCK	1											
COINS	2											
BUS	3											
SIGNS	4											
NUMBERS	5											
AD	6											
NUMBERS	7											
APPT.	8											
CALENDAR	9											
CALENDAR	10											
SIGN	11											
PICTURE	12											
MAP	13											
MAP	14											
MAP	15											
ENVELOPE	16											
ENVELOPE	17											
PICTURE	18											
COINS	19											
SIGNS	20											
SIGNS	21											
AD	22											
DIRECTIONS	23											
DIRECTIONS	24											

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS READING - FORM 33 B

STFT READING COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11
CASAS ITEMS		VOCAB	ALPHA	FACT	DIRECTN	SEQUEN	INDEX	GRAPHS	DIAGRM	SAFETY	ACCIDNT	EQUIPMT
MAP	1								■			
MAP	2								■			
DIRECTORY	3						■					
DIRECTORY	4						■					
CHECK	5								■			
CHECK	6								■			
AD	7								■			
AD	8								■			
MENU	9						■					
MENU	10						■					
APPLICATION	11				■							
APPLICATION	12				■							
PRICE CHART	13							■				
PRICE CHART	14							■				
MEDICINE LAB	15				■							
MEDICINE LAB	16				■							
DIRECTIONS	17									■		
DIRECTIONS	18									■		
SIGNS	19								■			
SIGNS	20								■			
FIRST AID	21			■								
FIRST AID	22			■								
MAP	23								■			
MAP	24								■			
AD	25			■								
AD	26			■								
LABEL	27			■								
LABEL	28			■								
FORM	29				■							
FORM	30				■							
FORM	31				■							
FORM	32				■							

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS READING - FORM 34 B

STFT READING COMPETENCIES

CASAS ITEMS		1 VOCAB	2 ALPHA	3 FACT	4 DIRECTN	5 SEQUEN	6 INDEX	7 GRAPHS	8 DIAGRM	9 SAFETY	10 ACCIDNT	11 EQUIPMT
MAP	1								■			
MAP	2								■			
SIGN	3								■			
SIGN	4								■			
DIRECTORY	5						■					
DIRECTORY	6						■					
CHECK	7								■			
CHECK	8								■			
AD	9								■			
AD	10								■			
APPLICATION	11				■							
APPLICATION	12				■							
LABEL	13			■								
LABEL	14			■								
MENU	15						■					
MENU	16						■					
PRICE CHART	17							■				
PRICE CHART	18							■				
DIRECTIONS	19				■							
DIRECTIONS	20				■							
FORM	21				■							
FORM	22				■							
LABEL/DIRECT	23				■							
LABEL/DIREC	24				■							
AD	25			■								
AD	26			■								
REPORT	27				■							
REPORT	28				■							
MAP	29								■			
MAP	30								■			
LABEL	31			■								
LABEL	32			■								

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS READING - FORM 35 C

STFT READING COMPETENCIES

C.	.S	1 VOCAB	2 ALPHA	3 FACT	4 DIRECTN	5 SEQUEN	6 INDEX	7 GRAPHS	8 DIAGRM	9 SAFETY	10 ACCIDNT	11 EQUIPMT
AD	1											
AD	2											
PRICE CHART	3											
PRICE CHART	4											
DRIVER TEST	5											
DRIVER TEST	6											
MAP	7											
MAP	8											
PAY STUB	9											
PAY STUB	10											
INSURE ARTC	11											
INSURE ARTC	12											
INSURE ARTC	13											
INTERVIEW	14											
INTERVIEW	15											
LABEL	16											
LABEL	17											
APPLICATION	18											
APPLICATION	19											
ALCOHOL ART	20											
ALCOHOL ART	21											
LEGAL ARTCL	22											
LEGAL ARTCL	23											
GRAPH	24											
GRAPH	25											
LETTER	26											
LETTER	27											
BILLS	28											
BILLS	29											
ADS	30											
ADS	31											
LEASE-ARTCL	32											
LEASE-ARTCL	33											
JOBS	34											
JOBS	35											
NEWS ARTICL	36											
NEWS ARTICL	37											
CHART	38											

Participant Name_____ Date Entered_____

Company

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS READING - FORM 36 C

STFT READING COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11
CASAS ITEMS		VOCAB	ALPHA	FACT	DIRECTN	SEQUEN	INDEX	GRAPHS	DIAGRM	SAFETY	ACCIDNT	EQUIPMT
AD	1			■								
AD	2			■								
PAY STUB	3							■				
PAY STUB	4							■				
LABEL	5			■								
LABEL	6			■								
MAP	7								■			
MAP	8								■			
SHOP ARTICL	9			■								
SHOP ARTICL	10			■								
SPEED ARTIC	11			■								
SPEED ARTIC	12			■								
JOB ARTICLE	13			■								
JOB ARTICLE	14			■								
RESUME'	15				■							
RESUME'	16				■							
INSUR POLICY	17			■								
INSUR POLICY	18			■								
INSUR POLICY	19			■								
GRAPH	20							■				
GRAPH	21							■				
LEGAL ARTCL	22			■								
LEGAL ARTCL	23			■								
LETTER	24			■								
LETTER	25			■								
SMOKE ARTC	26			■								
SMOKE ARTC	27			■								
ADS	28			■								
ADS	29			■								
PURCHAS ART	30			■								
PURCHAS ART	31			■								
JOBS	32			■								
JOBS	33			■								
RENTAL ARTC	34			■								
RENTAL ARTC	35			■								
CHART	36							■				
NEWS ARTICL	37			■								
NEWS ARTICL	38			■								

Participant Name _____ 143 _____ Date Entered _____

Company

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS MATH - FORM 31 A

STFT MATH COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11	12	13
CASAS ITEMS		WHOLE	FRACS	DECIM	% AGE	CNVER	AVERG	ESTIMT	RATIO	GRAPH	TIME	MEASR	INSTR	METRIC
TIME	1										■			
MONY	2	■												
ADDITION	3	■												
SUBTRACTION	4	■												
MULTIPLY	5	■												
DIVIDE	6	■												
MEASURE	7											■		
TIME	8										■			
MONEY	9	■												
TIME	10									■				
TIME	11										■			
MONEY	12	■												
MONEY	13	■												
GRAPH	14									■				
GRAPH	15									■				
DECIMALS/MONEY	16			■										
X DECIMALS	17			■										
- DECIMALS	18			■										
MULTIPLY	19	■												
MAPS	20									■				
ENGLISH MEASUR	21											■		
ENGLISH MEASUR	22											■		
CHART	23									■				
CHART	24									■				

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS MATH - FORM 32 A

STFT MATH COMPETENCIES

CASAS ITEMS		1 WHOLE	2 FRACS	3 DECIM	4 % AGE	5 CNVER	6 AVERG	7 ESTIMT	8 RATIO	9 GRAPH	10 TIME	11 MEASR	12 INSTR	13 METRIC
TIME	1										■			
+ MONEY	2	■												
ADDITION	3	■												
SUBTRACTION	4	■												
MULTIPLY	5	■												
DIVIDE	6	■												
MEASURE	7											■		
TIME	8										■			
MONEY	9	■												
TIME	10									■				
TIME	11										■			
MONEY	12	■												
GRAPHS	13									■				
GRAPHS	14									■				
MONEY	15	■												
MONEY/DECIMALS	16			■										
~ DECIMALS	17			■										
~ DECIMALS	18			■										
+ DECIMALS	19			■										
MAPS	20									■				
CHARTS	21									■				
CHARTS	22									■				
ENGLISH MEASUR	23											■		
ENGLISH MEASUR	24											■		

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS MATH - FORM 33 B

STFT MATH COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11	12	13
CASAS ITEMS		WHOLE	FRACS	DECIM	% AGE	CNVER	AVERG	ESTIMT	RATIO	GRAPH	TIME	MEASR	INSTR	METRIC
TIME	1										■			
MEASURE INSTRU	2												■	
TIME/X DECI	3			■							■			
TIME	4										■			
TIME	5										■			
TIME	6										■			
MULT/DIVIDE	7	■												
DIVIDE/PROB SOLV	8	■												
TIME CHART	9									■	■			
CALC. % AGE	10				■									
CALC. % AGE	11				■									
WHOLE NUMBERS	12	■												
ADDITION	13	■												
SUBTRACTION	14	■												
ADD/SUBTRACT	15	■												
DIVISION	16	■												
GRAPH	17									■				
GRAPH	18									■				
ADDITION	19	■												
DIVISION	20	■												
TIME	21										■			
TIME	22										■			
MEASURE	23											■		
MEASURE	24											■		
METRIC	25													■
SUBTRACTION	26	■												
TAX FORM	27									■				
TAX FORM	28									■				
SUBTRACTION	29	■												
X FRACTIONS	30	■												

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS MATH - FORM 34 B

STFT MATH COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11	12	13
CASAS ITEMS		WHOLE	FRACS	DECIM	% AGE	CNVER	AVERG	ESTIMT	RATIO	GRAPH	TIME	MEASR	INSTR	METRIC
CHARTS	1									■				
CHARTS/X DECI	2			■						■				
TIME	3										■			
TIME	4									■				
MENU	5									■				
MENU/+ DECIMAL	6			■						■				
MEASURE	7											■		
MEASURE	8											■		
MEASURE	9											■		
~ DECIMALS	10			■										
+/- DECIMALS	11			■										
CHART/CALC. %	12				■					■				
+ DECI/CALC. %	13			■	■									
TIME	14										■			
CHART	15									■				
CONV. MEASURE	16											■		
CONV. MEASURE	17											■		
CHART/X DECIMAL	18			■						■				
CHART/+ - DECI	19			■						■				
TAX FORM/ADD	20	■								■				
TAX FORM/SUBTR	21	■								■				
ADVERTISE/- DECI	22			■						■				
TIME	23										■			
TIME	24										■			
GRAPH	25									■				
GRAPH	26									■				
METRIC	27													■
+/-DECI, CKBOOK	28			■						■				
AREA	29											■		
AREA	30											■		

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

COMMENTS:

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS MATH - FORM 35 C

STFT MATH COMPETENCIES

		1	2	3	4	5	6	7	8	9	10	11	12	13
CASAS ITEMS		WHOLE	FRACS	DECIM	% AGE	CNVER	AVERG	ESTIMT	RATIO	GRAPH	TIME	MEASR	INSTR	METRIC
+ DECIMALS	1			■										
CALC. % AGE	2				■									
MAP/CALC. TIME	3									■	■			
MAP/ CALC. TIME	4									■	■			
+ FRACTIONS	5		■											
X/- DECIMALS	6			■										
~ DECI/CONV FRA	7			■		■								
X FRACS/WHOLE	8	■		■										
GRAPH	9									■				
GRAPH	10									■				
ADD/SUBTRACT	11	■												
ADD/SUBTRACT	12	■												
+ FRACTIONS	13		■											
X DECIMALS	14			■										
DECIMAL CHART	15			■										
ROUNDING	16							■						
LONG DIVISION	17	■												
MEASURE	18											■		
MAP/X FRACTION	19		■							■				
MAP	20									■				
AREA	21											■		
AREA	22											■		
PERIMETER	23											■		
- DECIMALS	24			■										
~ DECI/ROUNDING	25			■				■						
CALC. % AGE	26				■									
CALC. % AGE	27				■									
MEASURE	28											■		
MEASURE	29											■		
TAX FORMS/+ DECI	30			■						■				
METRIC	31													■
METRIC-ENGLISH	32													■
X FRAC/DECIMAL	33			■	■									
GRAPH/% AGE	34				■					■				
X DECIMALS	35			■										

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

SKILLS TODAY FOR TOMORROW
STUDENT PROFILE SHEET
CASAS MATH - FORM 36 C

STFT MATH COMPETENCIES

CASAS ITEMS		1 WHOLE	2 FRACS	3 DECIM	4 % AGE	5 CNVER	6 AVERG	7 ESTIMT	8 RATIO	9 GRAPH	10 TIME	11 MEASR	12 INSTR	13 METRIC
CALC. % AGE	1				■									
X FRACTIONS	2		■											
X FRACTIONS	3		■											
~ DECIMALS	4			■										
% AGE, ~ DECIMAL	5				■									
LONG DIVISION	6	■												
CALC. TIME	7									■	■			
CALC. TIME	8										■			
GRAPH/CALC. %	9				■					■				
GRAPH/ CALC. %	10				■					■				
~/- DECIMALS	11			■										
+/- DECIMALS	12			■										
+/x METRIC	13													■
+ DECIMALS	14			■										
PERIMETER	15											■		
- FRACTIONS	16		■											
AREA	17											■		
+ FRACTIONS	18		■											
~ DECI/CON FRAC	19			■		■								
X FRACTIONS	20		■											
GRAPH	21									■				
GRAPH	22									■				
MEASURE	23											■		
MEASURE	24											■		
~ DECIMALS	25			■										
~ DECIMALS	26			■										
CALC. % AGE	27				■									
CALC. % AGE	28				■									
MEASURE	29											■		
~ DECIMALS	30			■										
ROUND DECIMALS	31			■										
~ DECIMALS	32			■										
COMPARE DECIMA	33			■										
CUBIC FEET	34											■		
CUBIC CONVERT	35											■		

PARTICIPANT NAME_____ DATE ENTERED _____

COMPANY_____

EXHIBIT D

Pre-Course Assessment

Use a calculator to multiply or divide the following:

1.) 10,031
x 5,062

2.) 4,078
x 679

3.) 9,868 ÷ 2,467= _____

4.) 7 ÷ 16= _____

Please return the calculator to your instructor.

This part of the pre-course assessment should be done by hand without a calculator.
(You should use the empty spaces on the page for calculations.)

Add the following:

5.) 1,086
+ 957

6.) 3,498
17,582
10,903
7,649
+ 24

Subtract the following:

7.) 4,001
- 9

8.) 723
- 678

Multiply the following:

9.) 2,089
x 972

10.) 456 x 68= _____

Divide the following:

11.) 14,832 ÷ 16= _____

12.) 4,047 ÷ 213= _____

Add the following fractions:

13.) $^{4}/_{16} + {}^{15}/_{16}$ = _____

14.) $^{19}/_{32} + {}^{48}/_{64}$ = _____

Skills TODAY for TOMORROW
Catonsville Community College & PIM&SP
A Partnership For The Future.

ON-THE-JOB MATH
PRE-ASSESSMENT: PART II

1. Add $3\frac{5}{16} + 1\frac{7}{12}$

2. Subtract $3\frac{15}{16} - 1\frac{3}{4}$

Change these fractions to decimals:

3. $\frac{3}{4}$

4. $\frac{11}{16}$

5. 9,632 copies of a book are being shipped to 2 destinations; 5,472 copies to one destination and the rest to a second. If each carton will hold 114 books, how many cartons will be needed for each shipment?

6. If 1 inch = 25.4 millimeters, what are the sizes in millimeters of a book that is 8 1/2 inches by 11 inches?

13. How many minutes are there in 4 3/4 hours?

14. What percent of 20 is 12?

15. The bindery packed 44 cartons in the morning and 28 in the afternoon. What percent of the total day's work was packed in the morning?

16. Multiply: 2 3/4 x 2 2/3

17. Divide: 4 2/3 ÷ 3 1/2

Post-Course Assessment

This post-course assessment has been designed to cover all the skills addressed in the WorkPLACE™ On-The-Job Math Computations Course. Once your instructor scores the assessments, you will meet individually with him or her to discuss your results. At that meeting, you will also plan future work and educational goals based on your proficiency of the skills attained during this course.

Again, please note that your individual scores will be treated as confidential information.

Unit 1

Directions: Answer all of the following questions. Always give your answer to fraction questions in the lowest possible terms.

1.) A press operator has worked 4 hours of a 12 hour shift. **What fraction of the shift has been worked?**

_____

2.) A press crew has produced 12,000 pieces of a 16,000 run. **What fraction of the run is completed?**

_____

3.) A graphic that is 15" long and 12" wide has to be reduced so the width is 8". **What will the length of the reduced picture be?**

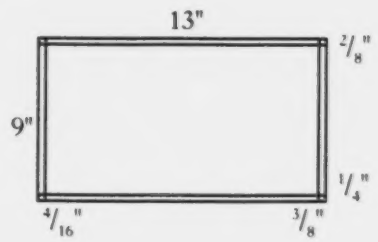
_____

4.) **A 24" by 36" finished size poster is produced on a 26" x 40" press size sheet of paper. The poster image bleeds $^1/_8$ " past the final trim line on all four sides. The printing image is exactly centered on the sheet. What are the dimensions of the paper to be trimmed off?**

_____

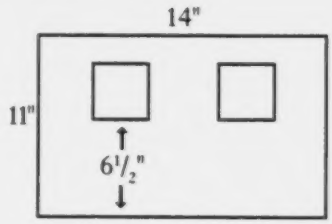
5.) Review the following press sheet layout and determine the finished size of the product.

_____



6.) A customer has furnished the camera ready mechanical illustrated below. The window sizes on the mechanical are $3\ ^3/_{32}$" x $3\ ^3/_{32}$" square. What is the distance from the top trim line to the top of the window?

_____



7.) A small job is to be cut on a guillotine paper cutter. One lift of stock that measures $11\ ^{11}/_{16}$" in length is to be cut in half. What will the length of the finished stock be?

_____

8.) If a specialty ink is sold in one pound cans for $12.20 per can, how many cans can be bought for $61.00?

_____

9.) If a sheetfed press can produce 10,000 signatures per hour at top speed, how many signatures can be produced in 15.5 hours?

_____

Post-Course Assessment: Unit 1 (Cont'd)

10.) If one column of text is $3\ ^{3}/_{16}$" wide, how wide are three columns?

_____

11.) If four columns of text are $21\ ^{5}/_{8}$" wide, how wide is each column?

_____

Unit 2

12.) A job begins at 1206 and ends at 0512. How long did it take?

_____

13.) An estimator is working on a set of specifications for a new job. The job specifications are nearly identical to a project estimated last week, except the run quantity is twice as much. The running time on the previous estimate was 2 hours and 36 minutes.

About how long should it take to run this job?

_____

14.) Time is measured in 6 minute units in many companies in the print industry. How may 6 minute units are there in a 12 hour shift?

_____

15.) If a job took 14, 6 minute units, how many hours and minutes did it take to complete?

_____

16.) One window is $2\ ^{5}/_{16}$" wide. **How wide will four such windows be?**

_____

17.) A skid of work is being packed in cartons in the bindery, and it was just trimmed on a 3 knife trimmer. The skid is stacked with 24 lifts in a layer, 16 layers high. Each lift on the skid contains 7 books. The job ticket indicates that the customer ordered 5,000 books, plus or minus the customary 10% to allow for manufacturing waste and spoilage.

a. **How many skids of work are you looking for to complete this job?**

_____

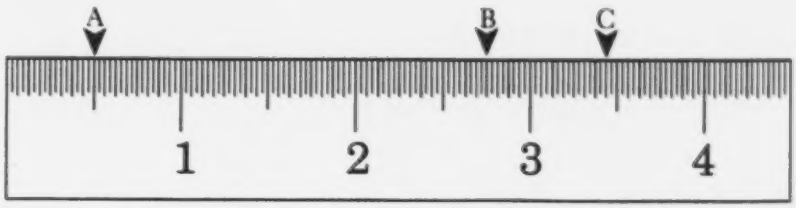
b. **If all the work for this job is packed identically on two skids, what will the final quantity shipped to the client be?**

_____

18.) A regular customer has just finished the process of converting from hand page make-up to electronic page make-up. The first batch of page mechanicals has just been received. The instructions say that the distance between the final trim marks are 20.0 and 26.3 centimeters.

What is the size of the product?

_____



19.) What is the distance between points A and B in the ruler above?

_____

20.) Will a 2" graphic fit between points A and C?

_____

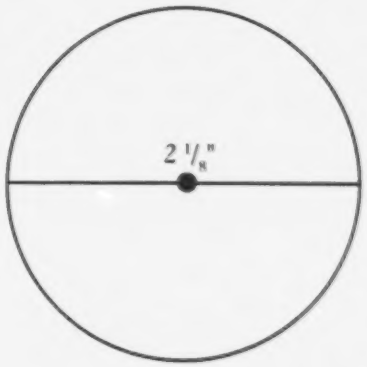
21.) What is the distance between points A and C in the ruler above?

_____

22.) The circle in the diagram below has a diameter of $2\frac{1}{8}$".

How long is the radius? _____

What is the circumference? _____



23.) Below are 5 angles, label them acute, reflex, obtuse, or right.

A. _____

B. _____

C. _____

D. _____

E. _____

24.) How many degrees are in a right angle?

_____

25.) In the diagrams above, which angle is approximately:

45°: _____ 315°: _____ 120°: _____

Unit 3

For these questions, be sure to estimate your answers.

26.) If the bindery takes 14 minutes to complete 100 perfect bound books, about how long will it take to complete 1,545?

A. 3 $^{1}/_{2}$ hours

B. 3 hours

C. 2 $^{1}/_{2}$ hours

27.) If a sheetfed press can produce 11,000 impressions an hour, about how long will it take to produce 160,000?

A. 17 hours

B. 12 $^{1}/_{4}$ hours

C. 14 $^{1}/_{2}$ hours

28.) An apprentice asks a journeyman stripper if two 4 $^{5}/_{16}$" square windows positioned side by side with an $^{1}/_{8}$" in between the windows will fit in a 9 $^{3}/_{4}$" final trim size product. Will they?

29.) A job takes 191 minutes. About how many hours is that?

A. 2

B. 4

C. 3

30.) A job uses 129 minutes Monday morning and 184 minutes Monday afternoon. About how many hours will the whole job take?

A. 7

B. 8

C. 5

31.) Blankets cost $70. If ABZ Graphics Communications Company budgeted $4,800 for blankets, about how many can they buy this year?

A. 70

B. 60

C. 80

32.) ABZ Graphics Communications Company used 5,432 drums of ink last year.

If the shop operated 322 days of the year, about how many drums were used per day?

A. 21

B. 17

C. 18

33.) The pressroom supervisor is starting a new procedure. Every week, press operators must report the total number of impressions on their press—to the nearest hundred. In the chart below are the actual readings on one of the presses. **Fill in the numbers the press operators would report.**

Date	Total Impressions	Number reported to Supervisor
9/13/90	144,359	_____
9/20/90	234,235	_____
9/27/90	498,289	_____
10/3/90	734,591	_____

34.) A rush job comes in from one of ABZ Graphic Communications Company's biggest clients. The run is 120,000. The fastest press ABZ has can produce 11,000 impressions per hour. **How much press time will the job take?**

A. 11 hours

B. 10 hours

C. 14 hours

35.) Your shift began at 1600. A one half-hour meal break was taken about half way through the eight hour shift. The job you were working on was finished in 5.3 hours. You forgot to punch your time card out when you finished the job. You brought your time card to the foreman to write your time in.

What time did the foreman enter on your time card for meal start and stop time, and what time was the job finished?

_____

41.) All employees gathered together for a Holiday party, bringing one inexpensive gift. When it was time for exchanging, everyone's name was placed in a hat and a blindfolded individual drew names (the names were written on the same size pieces of paper and folded once).

Was the drawing random?

_____

42.) Four cartons of paper are removed from a skid of paper. Each carton is weighed:

38 pounds 40 pounds 42 pounds 36 pounds

One carton, from another skid weighs 44 pounds.

What is the variation from the mean of the first four boxes?

_____

You have now completed the Post-Course Assessment.
Follow the instructions of your instructor.

36.) A web press uses a full roll of paper about every 18 minutes. The job on press now requires a double web configuration, which means two rolls are running at the same time. The job ticket indicates the job will run for 26.9 hours.

How many rolls of paper will this job take?

_____

Unit 4

37.) Four sample press sheets were found to have the following black density readings:

1.62 1.53 1.63 1.49

What is the range?

_____

38.) The estimating department delivered six bids yesterday:

$2,010 $10,400

$4,330 $8,260

What was the average bid price?

_____

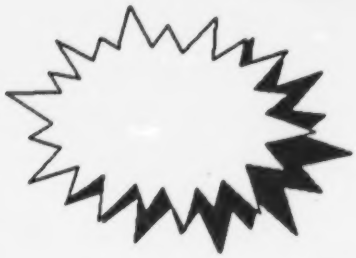
39.) **What percentage of 300 is 200?**

_____

40.) **Convert 103% to a decimal.**

_____

CRITICAL THINKING & PROBLEM-SOLVING SELF-ASSESSMENT



TIME & RESOURCES

DIRECTIONS: CAREFULLY READ ALL CHOICES IN EACH SECTION.
CHECK THE RESPONSE THAT BEST DESCRIBES YOU.

WHEN A PROBLEM OCCURS, I USUALLY:

1. A. _____SPEND MOST OF MY TIME WORRYING ABOUT IT
   B. _____TAKE SOME STEPS TO SOLVE IT
   C. _____DEVELOP A PLAN TO SOLVE IT RIGHT AWAY

2. A. _____ACT AT THE LAST MINUTE/RUSH FOR DEADLINES
   B. _____SET A SCHEDULE OR TIME TABLE TO SOLVE IT
   C. _____BUILD LEAD TIME INTO MY PLANS

3. A. _____HAVE UNORGANIZED OR INACCESSIBLE RESOURCES
   B. _____BARELY HAVE WHAT I NEED
   C. _____HAVE SOME RESOURCES AVAILABLE
   D. _____HAVE ORGANIZED RESOURCES WHICH I HAVE DEVELOPED

4. A. _____HAVE SOME DUPLICATION OF EFFORT/RESOURCES
   B. _____USE RESOURCES FAIRLY WELL
   C. _____USE RESOURCES WISELY

5. A. _____NEED A LOT OF TIME/HAVE TO DO THINGS MORE THAN ONCE
   B. _____SAVE TIME BY PLANNING ON THE SPOT
   C. _____HAVE SAVED TIME BY PRIOR PLANNING

6. IF I HAVE SLOW TIME AT WORK, I USUALLY:

   A. _____DO SOMETHING ENJOYABLE
   B. _____DO ONLY WHAT IS NECESSARY AT THE MOMENT
   C. _____PLAN/TAKE ACTIONS WHICH WILL HELP ME ON MY JOB

CRITICAL THINKING & PROBLEM-SOLVING
ASSESSMENT
TIME & RESOURCES

DIRECTIONS: CAREFULLY READ ALL CHOICES IN EACH SECTION.
CHECK THE RESPONSE THAT BEST DESCRIBES YOU.

7. WHEN I RECEIVE INFORMATION, I USUALLY:

A. _____LOSE IT
B. _____ACT ON IT IMMEDIATELY OR FILE FOR FUTURE USE
C. _____SEE HOW IT FITS INTO MY LONG-RANGE PLANS

8. THE AMOUNT OF TIME IN A DAY:

A. _____IS NEVER ENOUGH
B. _____IS ENOUGH TO BARELY GET BY
C. _____CAN BE MANAGED WISELY TO ACCOMPLISH GOALS

9. MOST OF MY PROBLEMS:

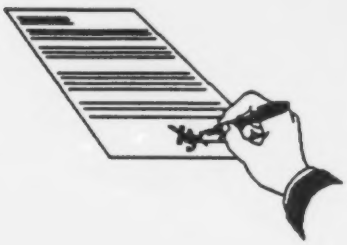
A. _____SEEM TO HANG ON FOREVER
B. _____ARE RESOLVED AFTER A TIME
C. _____ARE RESOLVED IN A TIMELY FASHION THROUGH PLANNING

CHECK AS MANY AS APPLY TO YOU:

10. MY JOB INVOLVES A LOT OF MY TIME BECAUSE IT INVOLVES:

A. _____LEARNING
B. _____CREATIVITY
C. _____CHANGE
D. _____AUTHORITY I DON'T HAVE
E. _____RESOURCES I DON'T HAVE
F. _____DELEGATION OF WORK
G. _____GOALS THAT MAY NOT BE REALISTIC
H. _____OVERSCHEDULING OF MY TIME
I. _____HIGH OR RIGOROUS STANDARDS

CRITICAL THINKING & PROBLEM-SOLVING SELF-ASSESSMENT



SAMPLE CASE STUDY WRITING ACTIVITY

DIRECTIONS: WRITE A FEW SENTENCES OR A BRIEF PARAGRAPH GIVING THE FOLLOWING INFORMATION:

I SOLVED A PROBLEM IN THE PAST BY:

THE RESULTS OF MY PROBLEM-SOLVING EFFORTS WERE:

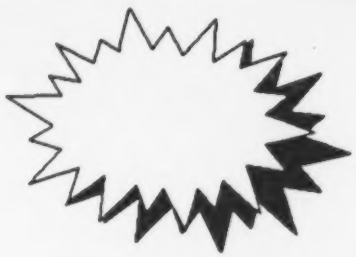
CRITICAL THINKING & PROBLEM-SOLVING
SAMPLE CASE STUDY
WRITING ACTIVITY

THE PROBLEM-SOLVING STRATEGIES WHICH I USED THAT WORKED WELL WERE:

THINGS WHICH COULD HAVE BEEN DONE BETTER WERE:

MOST OF MY TIME ON THIS PROBLEM WAS SPENT:

CRITICAL THINKING & PROBLEM-SOLVING
SELF-ASSESSMENT



SATISFACTION

DIRECTIONS: CAREFULLY READ ALL CHOICES IN EACH SECTION.
CHECK THE RESPONSE THAT BEST DESCRIBES YOU.

1. ON THE WHOLE, I WOULD RATE MY PROBLEM-SOLVING STRATEGIES AS:

   A. _____NOT SATISFACTORY
   B. _____SOMEWHAT SATISFACTORY
   C. _____SATISFACTORY
   D. _____QUITE SATISFACTORY

CHECK AS MANY AS APPLY TO YOU:

2. WHEN I HAVE TO SOLVE A PROBLEM, I USUALLY FEEL:

   A. _____AFRAID OF FAILURE
   B. _____BURNT-OUT
   C. _____HELPLESS
   D. _____OVERWHELMED
   E. _____CAPABLE
   F. _____CONFIDENT

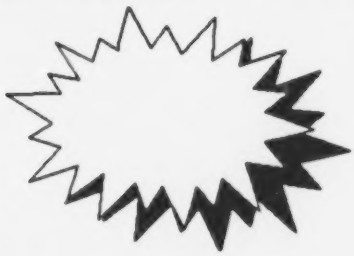
3. THE RESULTS OF MY PROBLEM-SOLVING IN THE PAST HAVE:

   A. _____BEEN LESS THAN SUCCESSFUL
   B. _____BEEN SOMEWHAT SUCCESSFUL
   C. _____BEEN VERY SUCCESSFUL
   D. _____BEEN NEUTRAL
   E. _____LED TO OTHER PROBLEMS

4. AFTER A PROBLEM HAS BEEN SOLVED, I USUALLY:

   A. _____AM GLAD IT'S OVER
   B. _____GIVE A SIGH OF RELIEF
   C. _____DON'T LOOK BACK
   D. _____BLAME OR PRAISE OTHERS
   E. _____DENY IT OR TAKE CREDIT
   F. _____WISH I HAD DONE SOMETHING DIFFERENT
   G. _____LEARN FROM THE PAST
   H. _____EVALUATE CAREFULLY

CRITICAL THINKING & PROBLEM-SOLVING



SELF AND OTHERS

DIRECTIONS: CAREFULLY READ ALL CHOICES IN EACH SECTION.
CHECK THE RESPONSE THAT BEST DESCRIBES YOU.

WHEN A PROBLEM OCCURS, I USUALLY:

1. A. _____RELY ON HELP FROM OTHERS
   B. _____WORK INDEPENDENTLY
   C. _____WORK WITH OTHERS AS A TEAM

2. A. _____LET OTHERS DEAL WITH IT
   B. _____TAKE ON MORE THAN IS NECESSARY
   C. _____DO WHAT I CAN/DELEGATE APPROPRIATELY

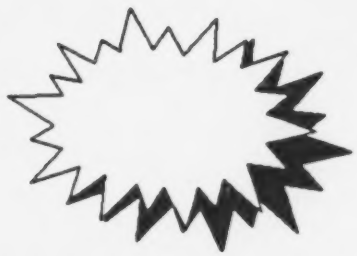
3. A. _____AM MOST INFLUENCED BY OTHERS' IDEAS
   B. _____AM MOST INFLUENCED BY MY OWN IDEAS
   C. _____AM MOST INFLUENCED BY COMPROMISES

4. A. _____GET BOGGED DOWN IN THE SYSTEM
   B. _____WORK THROUGH CHANNELS, EVEN THOUGH IT TAKES TIME
   C. _____WORK WELL WITHIN THE SYSTEM WITH SOME FLEXIBILITY

5. A. _____IGNORE FEEDBACK IF IT IS NEGATIVE
   B. _____DEFEND MY IDEAS AGAINST CRITICISM
   C. _____DO MY BEST, INCORPORATE SUGGESTIONS FOR IMPROVEMENT

6. A. _____IGNORE IT
   B. _____WAIT FOR MY WORK GROUP OR THOSE IN AUTHORITY TO ACT
   C. _____DO WHAT I CAN
   D. _____LEAD OTHERS TO A SOLUTION

CRITICAL THINKING & PROBLEM-SOLVING SELF-ASSESSMENT



STYLE

DIRECTIONS: CAREFULLY READ ALL CHOICES IN EACH SECTION.
CHECK THE RESPONSE THAT BEST DESCRIBES YOU.

WHEN A PROBLEM OCCURS, I USUALLY:

1. A. _____DON'T KNOW WHAT TO DO/HAVEN'T THOUGHT ABOUT
   B. _____TRY DIFFERENT THINGS
   C. _____TRY TO PLAN, BUT DON'T ALWAYS FOLLOW THROUGH
   D. _____PLAN, ORGANIZE

2. A. _____PANIC
   B. _____PROCRASTINATE
   C. _____REACT
   D. _____PLAN

3. A. _____DENY IT
   B. _____AVOID IT
   C. _____FACE IT

4. A. _____BECOME EMOTIONALLY INVOLVED
   B. _____DO ONLY WHAT IS NECESSARY
   C. _____BECOME INVOLVED IN THE CHALLENGE

5. A. _____LET IT RESOLVE ITSELF
   B. _____DO WHAT SEEMS BEST AT THE TIME
   C. _____SOLVE IT EVENTUALLY
   D. _____SET GOALS, THEN ACT
   E. _____HAVE PLANNED FOR IT IN ADVANCE

6. A. _____ACT RANDOMLY
   B. _____ACT AS I HAVE IN THE PAST
   C. _____ADAPT TO CHANGE

7. A. _____GET BOGGED DOWN IN DETAILS
   B. _____LOOK AT THE WHOLE SITUATION
   C. _____BREAK THE TASK DOWN INTO MANAGEABLE PARTS

8. A. _____SOLVE IT IN THE EASIEST WAY
   B. _____DO WHAT WORKS AT THE MOMENT
   C. _____LOOK FOR A PERMANENT SOLUTION

9. A. _____DON'T TRY VERY HARD
   B. _____TRY FOR A TIME TO SOLVE IT
   C. _____WORK IT THROUGH
   D. _____SOLVE IT, NO MATTER WHAT

CRITICAL THINKING & PROBLEM-SOLVING
SELF-ASSESSMENT
STYLE

DIRECTIONS: CAREFULLY READ ALL CHOICES IN EACH SECTION.
CHECK THE RESPONSE THAT BEST DESCRIBES YOU.

WHEN A PROBLEM OCCURS, I USUALLY:

10. A. _____FEEL PANIC, FRUSTRATION, OR ANGER
B. _____FEEL I CAN COPE
C. _____FEEL CALM AND IN CONTROL

11. A. _____HOPE I LIVE THROUGH IT SOMEHOW
B. _____THINK ABOUT IT A LITTLE
C. _____TRY TO UNDERSTAND WHY

12. A. _____SPIN MY WHEELS
B. _____GET SOMETHING DONE
C. _____GET A LOT ACCOMPLISHED

13. A. _____IGNORE IT
B. _____COVER IT UP
C. _____COME THROUGH IN THE END
D. _____HAVE A PLAN TO SOLVE IT

14. I SEEM TO:

A. _____CREATE PROBLEMS FOR MYSELF
B. _____HAVE MORE THAN MY SHARE OF PROBLEMS
C. _____HAVE THE SAME PROBLEMS AS EVERYONE ELSE
D. _____HAVE FEW PROBLEMS

15. AFTER I'VE SOLVED A PROBLEM, I USUALLY FEEL:

A. _____RELIEF
B. _____SATISFACTION

CHECK AS MANY AS APPLY TO YOU:

16. THE WAY I SOLVE PROBLEMS IS MAINLY INFLUENCED BY:

A.	_____PARENTS	G.	_____WORK GROUP
B.	_____FAMILY	H.	_____SUPERVISOR
C.	_____FRIENDS	I.	_____THOSE I ADMIRE
D.	_____HABIT	J.	_____WHAT I OBSERVE
E.	_____CONVENIENCE	K.	_____MY OWN IDEAS
F.	_____TRIAL & ERROR	L.	_____PROVEN EXPERIENCE

ASSESSMENT

A pre- and post-assessment will be given, each consisting of a reading selection and oral directions that require attentive listening so that students can respond with a written summary. The writing sample will be scored holistically.

PRE-ASSESSMENT

TO THE INSTRUCTOR: The pre-assessment should be used as a tool to evaluate students' reading, writing, listening, and speaking skills. The students will read of a situation, listen to directions, and respond to the information in written form.

Distribute Answer Sheet A and have the students silently read the information. Then, read the following aloud to the class. Read the information only once, as if you are distracted and in a hurry:

> Hello, I am Mary Johnson, supervisor of the clerical department. As a new employee, you should be aware of a few details. Another new typist, Jane Smith, will be joining you tomorrow. She couldn't come today, so when I finish explaining your duties, I want you to write a memo to her summarizing what I have said.
>
> Typing and distributing mail are the most important duties of this job. Now about the typing. You are required to type company-related work given to you by the people in customer service. Some people may give you a lot, so make sure you're only doing department work. And be careful about spending time on private matters. Some people will be real sticklers about details. Make sure that you check details carefully before you type. And, of course, some will give you work at the last minute and expect you to finish it. Our policy for typists is anything handed to you within one hour before quitting time can be finished by noon the next working day.
>
> Mail comes twice a day, at 10 and 2. You will sort it and put it in the right boxes. If there is any mail that does not belong here, bundle it and mark it for return to the main post office.
>
> Now let me tell you about breaks. You get ten minutes in the morning and afternoon, but take them at about 10:30 and 2:30 because it's quieter then. And you get a half hour for lunch. Although the time for lunch is flexible, you should probably leave by 12:15.
>
> Now, if there are no questions, I have to run to personnel. Why don't you get that memo done while I'm gone.

After you have read the instructions and they have taken notes, distribute Answer Sheets B and C and have the students complete the memo and questions using their notes. As they finish, distribute the reading selection and answer sheet D. Remember to collect all four answer sheets for scoring.

SCORING FOR PRE-ASSESSMENT

OBJECTIVE NUMBERS	TEST SECTION	HOW ASSESSED	POINT VALUE
5:Read,follow directions	A	took notes?	
		complete notes	2
		brief notes	1
		no notes	0
1:Listen	B	Number details in notes	1 ea. (10)
2,4,6,8,9: record info in writing	C	*Content (10 details)	0-4
		*Organization & format	0-4
		*Sentence structure	0-4
		*Mechanics	0-4
7:Verify info.	D	List speaker's problems	0-2
		List questions	0-4
3,5:Read to locate info.	E	ans. 4 questions	4 ea.
		TOTAL POSSIBLE SCORE -	50 PTS

*CRITERIA FOR WRITING SAMPLE:

CONTENT:

If 25% of details included	1 pt
If 50% of details included	2 pts
If 75% of details included	3 pts
If 100% of details included	4 pts

ORGANIZATION

If content shows minimal organization	1 pt
If content is organized in 3 sections: typing, mail, breaks	2 pts
If content shows above organization PLUS, is divided into paragraphs and includes introduction and closing	3 pts

FORMAT

If proper memo format used	1 pt

SENTENCE STRUCTURE

If more than 5 sentence fragments and comma splices	0 pt
If no more than 2 sentence fragments and comma splices	1 pt
If mostly simple sentences, but with more than 3 grammar errors	2 pt
If mostly simple sentences but with 3 or less grammar errors	3 pt
If uses variety of sentence patterns with no more than 1 grammar error.	4 pt

MECHANICS (SPELLING, PUNCTUATION,CAPITALIZATION)

If more than 7 errors	0 pt
If 6 or 7 errors	1 pt
If 4 or 5 errors	2 pt
If 2 or 3 errors	3 pt
If 0 or 1 errors	4 pt

A

NAME _____

Imagine that you are a 45-year-old homemaker returning to the work force. You have been hired as a typist and are listening to a supervisor explain your duties on your first day of work. She is a 27-year-old woman who appears very efficient but pre-occupied with other matters and is in a hurry to give you your directions so that you can finish filling out forms for the personnel department.

Listen carefully to her directions because not only will you need them for your own information, you will be expected to write a summary of the information for another new employee who can't be at the orientation. Take notes below.

NOTES

B

NAME _____
(Memo #1)

C

NAME _____

1. What are problems you had in understanding the information?

2. What questions would you ask to clarify the supervisor's instructions?

NAME _____

Directions: Read the attached notice to find the answers to these questions.

1. What two things are employers required to do under this law?

2. What does this law require employees to do?

3. If you, as a worker, feel your plant has an unsafe condition, what should you do?

4. What two protections are guaranteed to you if you do this?

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Requirements of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected, whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory penalties against employers of up to $1,000 for each serious violation and for optional penalties of up to $1,000 for each nonserious violation. Penalties of up to $1,000 per day may be proposed for failure to correct violations within the proposed time period. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to $10,000 for each such violation.

Criminal penalties are also provided for in the Act. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of not more than $10,000, or by imprisonment for not more than six months, or by both. Conviction of an employer after a first conviction doubles these maximum penalties.

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discrimination.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

Such voluntary action should initially focus on the identification and elimination of hazards that could cause death, injury, or illness to employees and supervisors. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free consultative assistance, without citation or penalty, is available to employers, on request, through OSHA supported programs in most State departments of labor or health.

More Information

Additional information and copies of the Act, specific OSHA safety and health standards, and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following locations:

Atlanta, Georgia
Boston, Massachusetts
Chicago, Illinois
Dallas, Texas
Denver, Colorado
Kansas City, Missouri
New York, New York
Philadelphia, Pennsylvania
San Francisco, California
Seattle, Washington

Telephone numbers for these offices, and additional area office locations, are listed in the telephone directory under the United States Department of Labor in the United States Government listing.

Washington, D.C.
1985
OSHA 2203

William E. Brock, Secretary of Labor

U.S. Department of Labor
Occupational Safety and Health Administration

Under provisions of Title 29, Code of Federal Regulations, Part 1903.2(a)(1) employers must post this notice (or a facsimile) in a conspicuous place where notices to employees are customarily posted.

BEST COPY AVAILABLE

POST-ASSESSMENT

TO THE INSTRUCTOR: Distribute Answer Sheet A and have the students silently read the information. Then, read the following aloud to the class. Read the information only once, as if you are distracted and in a hurry:

Hello, my name is Hank Cranshaw, and I am the mailroom foreman. As a mailing clerk, you are to mail or dispatch books in mailers, envelopes, cartons, or other type packages according to specified schedules posted at the beginning of each week. You should wrap loose bundles of books by hand using the tying machine. Always remember to place the invoices with the order in single-piece mailers or cartons. Weigh individual mailers and cartons to determine correct mailing fees. The chart of package weights and corresponding fees is on the scale. Apply labels and postage to each package and sort them according to destination and place in specified mail bags or carts.

Although your shift begins at 8:00 A.M., you should report to the mailroom no later than 7:45 A.M. to find out what work has priority from the shift before yours. Before you leave at 5:00, you must explain to the next shift what work still remains. You will have two fifteen-minute breaks, one in the morning and one in the afternoon. Your lunch break will last thirty minutes, starting between 12 and 12:15, and ending at 12:30 to 12:45.

If there are no questions, I would like you to write a memo now explaining your duties and work schedule to Pete Olson, another new employee who could not start today. I'll check the memo when I come back from Personnel with your health benefits package.

A

NAME _____

You are a fifty-year-old male employee recently terminated from your mail clerk job of fifteen years. You are at a job orientation at your new job site. The mailroom foreman is thirty years old and very impatient as he tells you of your job duties and work schedule.

Listen carefully to the message read by the instructor acting as the mailroom foreman. Take notes below while you listen.

Afterwards, prepare a memo to a fellow employee who needs to know the information, but could not be present at the orientation.

NOTES

B

NAME _____
(Memo)

C

NAME _____

1. What are problems you had in understanding the information?

2. What questions would you ask to clarify the supervisor's instructions?

NAME _____

Directions: Read the attached notice to find the answers to these questions. Write the answers in your own words.

1. What two things have to be included in an OSHA citation against an employer?

2. What punishment can be given to an employer who violates this law in a way that leads to the death of an employee?

3. What help can employers get through their state Health Department?

4. What is the first effort that an employer should take voluntarily?

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Requirements of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected, whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory penalties against employers of up to $1,000 for each serious violation and for optional penalties of up to $1,000 for each nonserious violation. Penalties of up to $1,000 per day may be proposed for failure to correct violations within the proposed time period. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to $10,000 for each such violation.

Criminal penalties are also provided for in the Act. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of not more than $10,000, or by imprisonment for not more than six months, or by both. Conviction of an employer after a first conviction doubles these maximum penalties.

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discrimination.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

Such voluntary action should initially focus on the identification and elimination of hazards that could cause death, injury, or illness to employees and supervisors. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free consultative assistance, without citation or penalty, is available to employers, on request, through OSHA supported programs in most State departments of labor or health.

More Information

Additional information and copies of the Act, specific OSHA safety and health standards, and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following locations:

Atlanta, Georgia
Boston, Massachusetts
Chicago, Illinois
Dallas, Texas
Denver, Colorado
Kansas City, Missouri
New York, New York
Philadelphia, Pennsylvania
San Francisco, California
Seattle, Washington

Telephone numbers for these offices, and additional area office locations, are listed in the telephone directory under the United States Department of Labor in the United States Government listing.

Washington, D.C.
1985
OSHA 2203

William E. Brock, Secretary of Labor

U.S. Department of Labor
Occupational Safety and Health Administration

Under provisions of Title 29, Code of Federal Regulations, Part 1903.2(a)(1) employers must post this notice (or a facsimile) in a conspicuous place where notices to employees are customarily posted.

EXHIBIT E

Name _____
Date _____
Company _____

READING/WRITING PRE-ASSESSMENT

Read the employee handbook section on TIME RECORDING; then answer the question.

> **Time Recording** - We are required by Federal Laws to keep daily time records. A time clock has been provided for this purpose. All employees are required to punch in at the beginning of their shift, lunch time, if they leave the building, and when they leave for the day. Do not punch in more than ten (10) minutes before normal start time and do not punch out more than ten (10) minutes after stopping time. No hourly employee is permitted to commence work before normal start time without the specific approval of the plant manager or plant foreman.
>
> No employee is permitted to punch a time card for another employee under any circumstances. Any alteration to the time cards, either a change of a time registration or the filling in of a missing registration, must be done by the plant manager or plant foreman. Any abuse of the time clock procedures will be cause for dismissal.

1. If you mistakenly punch in on someone else's time card, what should you do?

Writing I. Ed Lopez of Rose Paper Co. (555-6240) calls to speak to Jim Smith. He says, "Tell Jim that we do not have enough #56214 stock to fill his order. I have some alternatives to suggest. Have him call me." Complete the form on page 2 with this message.

To _____

Time _____ Date _____

while you were out

M _____

of _____

Phone No. (home) _____

(work) _____

- ☐ Came to see you
- ☐ Telephoned
- ☐ Returned your call
- ☐ Please call back
- ☐ Will call again
- ☐ Will not be in class/ meeting

Scheduled an appointment:

_____

Left the following message:

_____

_____

_____

_____

Recorder

Write the complete word for these abbreviations. (Don't worry about spelling.)

2. YTD

3. OD

4. @

Use the attached Material Safety Data chart to answer these questions.

5. What does this material look like?

6. What should you do if someone swallows this material?

7. What can result from burning this material?

HAZARD RATINGS	
HEALTH	1
FLAMMABILITY	3
REACTIVITY	0

MATERIAL SAFETY DATA SHEET

SECTION I

REVISED 3/14/87

PRODUCT NAME	DATE PREPARED	PRODUCT NUMBER
TYPE B CLEANER/FAST REDUCER	10/22/92	04S-678

	EMERGENCY TELEPHONE NO.
CRABCAKE INDUSTRIES	555-1234
ADDRESS (Number, Street, City, State and Zip Code)	D.U.N.S NO.
800 Main Street Baltimore, Maryland 20000	987-62

HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101)

Denatured Alcohol, Denatured Alcohol, Flammable Liquid, NA-1906

CHEMICAL NAME

ETHANOL (Denatured)

CHEMICAL FAMILY	FORMULA
ALCOHOLS	N/A

SECTION II - INGREDIENTS

(list all ingredients)

CAS REGISTRY NO. %W %W	CHEMICAL NAME(S)		Listed as a Carcinogen in NTP, IARC or OSHA 1910(z) (specify)
64-17-5	ETHYL ALCOHOL	81.3% By Volume	No
67-63-0	ISOPROPANOL	9.0% By Volume	No
67-56-1	METHYL ALCOHOL	4.2% By Volume	No

SECTION III - PHYSICAL DATA

BOILING POINT °F 78.5 °C		SPECIFIC GRAVITY (H,O-1) .808			
VAPOR PRESSURE @ °F °C 40 mm Hg psi		PERCENT VOLATILE BY VOLUME (%) 100%		PERCENT SOLD BY WEIGHT %	N/A
VAPOR DENSITY (AIR-1)	1.6	EVAPORATION RATE (-1) Butyl Acetate = 1	3.2		
SOLUBILITY IN WATER	100%	ph-	N/A		
APPEARANCE AND ODOR	Clear liquid; Characteristic Odor.			IS MATERIAL: X LIQUID SOLID GAS PASTE POWDER	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT 53 °F °C method used TCC	FLAMMABEL LIMITS	LEL 2.0	UEL 19.0

EXTINGUISHING MEDIA Use carbon dioxide or dry chemical for small fires.
Use alcohol type foam or water for large fires.

SPECIAL FIRE FIGHTING PROCEDURES

None

UNUSUAL FIRE AND EXPLOSION HAZARDS

Autoignition Temperature 793° F.

SECTION V - HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE - Conditions to Avoid

THRESHOLD LIMIT VALUE ☐
PERMISSIBLE EXPOSURE LIMIT ☐ 1,000

Swallowing liquid causes inebriation, headache, nausea, and vomiting. Liquid causes eye irritation.

Breathing of vapors may cause drowiness.

PRIMARY ROUTES OF ENTRY Inhalation (X) Skin Contact (X) Other (specify)

EMERGENCY AND FIRST AID PROCEDURES

Flush skin and eye contact with plenty of water. If inhaled remove to air; give artificial respiration if breathing has stopped.

Call a physician. If swallowed, induce vomiting.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	Avoid heat, sparks, and open flame.

INCOMPATIBILITY (materials to avoid)
None

HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition or burning may produce carbon monoxide

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	None

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Flush heavily with water.

WATER DISPOSAL METHOD

Incinerate

CERCLA (Superfund) REPORTABLE QUANTITY (in lbs) N/A

RCRA HAZARDOUS WASTE NO. (40 CFR 261.33) N/A

VOLATILE ORGANIC COMPOUND (VOC) (as packaged, minus water) N/A

Theoretical N/A lb/gal | Analytical N/A lb/gal

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type) Air-supplied mask in confined areas.

VENTILATION	LOCAL EXHAUST	Preferred	SPECIAL	N/A
	MECHANICAL (General)		OTHER	N/A

PROTECTIVE GLOVES Plastic Gloves | EYE PROTECTION Monogoggles

OTHER PROTECTIVE EQUIPMENT
Eye Bath and Safety Shower

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
WARNING! FLAMMABLE. Contains ingredients which render this product wholly unfit for beverage purpose; If taken internally will cause serious consequences. Keep away from heat, sparks, and open flame.

OTHER PRECAUTIONS
Keep container closed. Use with adequate ventilation.
FOR INDUSTRIAL USE ONLY.

DISTRIBUTION OF OVERTIME

Read this section of the union manual to find the answers to the following questions.

8. How is overtime offered fairly to employees in the same department and on the same shift?

9. Who will get preference for scheduled weekday overtime?

DISTRIBUTION OF OVERTIME

The company will distribute overtime as uniformly as practicable among qualified employees within a department, on a shift, within a job classification.

A. Preference will be given for occasional daily overtime to the employee who has worked all day on the job involved. Preference will be given for scheduled overtime from Monday through Friday to the crew that the company assigned to the equipment.

B. All overtime hours are to be recorded and kept posted up-to-date by Tuesday of each week in all departments. Duplicate copies of all recorded overtime to be furnished each chief steward and chairman of Grievance Committee. All departments' recorded overtime will be reviewed at the regular monthly grievance meeting by the Industrial Relations Manager and the Grievance Committee.

C. Overtime will be rotated among all qualified departmental employees on the shift until each has been offered one turn, after which rotation will start anew. The qualified department employee requested to work will be the employee with the lowest amount of recorded overtime. Should additional employees be needed to fulfill the overtime requirements, they shall be selected from the plant list within the shift and job classification concerned.

Use the index to answer the questions below.

INDEX

A

Abrasive materials in paper, 96
Absolute humidity, 56
Absorbency of paper, ink, 85, 88
Acidity of paper, 31, 91, 135-136
Adhesive coating, 6, 73
Air condition,
effect of building on, 61
effect of climate on, 60
effect of, on efficiency, 62
ideal, 60
Air-conditioning, 26, 50, 56-64
Air-conditioning equipment, 62
Air-conditioning requirements, 60
Alignment of fibers, 4, 13
Aluminum sulfate, 3, 31
Anti-offset sprays, 87
Ash content of paper, 107

B

Basis weight of paper, 105
Beater sizing, 2
Blistering, 30, 67
Bowed gripper edge, 26, 27, 55
Brightness of paper, 37, 150
Building requirements for air-conditioning, 61
Bulking thickness of paper, 105
Bursting strength of paper, 113

C

Calendar blackening, 41
Calendering of paper, 4
Chalking of ink, 93
prevention of, 94
Chemicals in paper, 31, 96
Climate, effect of, on air-conditioning, 60
Coating adhesives, 6, 73
Coated paper, 6
Coated papers, letterpress, 73
Coating, moisture
resistance of, 72, 73, 142
Coatings, film, for paper, 6
Color of paper, 37, 152
test for, 152
Conditioning, moisture,
chart, 53
Conditioning of paper, 25, 49-54
Contrast in printing, 37, 38
Counter-etching, 31
Curl, 27, 80, 83, 85
Curling tendency of paper, 14, 27, 83, 125
Cutter dust, 33

D

Dehumidifiers, 63
Density of paper, 14, 105
Desensitization of plates, 98
Dewpoint temperature, 56
Dimensional changes, 15, 17, 22, 23
Dimensional stability, 117
Dirt in paper, measurement of, 154
Distortion of paper, 20,21,22
Driers, effect on ink, 89
Drying of ink,
factors affecting, 32, 60, 88-93
tests for, 139
Drying of paper, 4
Dust, cutter, 33
Dusting of paper, 33, 71, 140

10. List the page(s) where you will find information on air conditioning climate effects.

11. List the page(s) where you will find tests for drying of ink.

BEST COPY AVAILABLE

FIRE EXTINGUISHERS: Use the chart to answer these questions.

12. A pile of paper scrap is on fire. The two nearest fire extinguishers are a red one with a black nozzle and a red one with a short hose. Which one should you use?

13. You see a fire in a corner but aren't sure what is burning. Which would be the best fire extinguisher to use?

TYPES OF FIRE EXTINGUISHERS

DESCRIPTION	CONTAINS	USED ON
Chrome cylinders with "A"	2 1/2 pressurized water	Class A fires paper, wood
Short red cylinder with black cone-shaped fiber nozzle. Labeled "BC"	"BC" 5 lb. CO_2 (carbon dioxide)	Class B and C fires. Oil and electrical. Can be used on Class A fires with limited effectiveness.
Red cylinder short hose and nozzle. Labeled "ABC"	"ABC" 6 or 10 lb. of dry chemical	Class A, B, and C fires. Paper, wood, oil, electrical.
Red cylinder, short	"ABC" 5 to 10 lb. halon	Computer rooms

Read the Employee Handbook section on Jury Duty to find the answers to these questions.

JURY DUTY

All regular, full-time employees required to serve on jury duty are eligible for time off with pay.

When you receive a notice to report for jury duty, you must notify your supervisor immediately. If the workload in your department is heavy, the company may request that you be excused or exempted from such duty. If you are not required to serve as a juror on a particular day, you must contact your supervisor as soon as possible to determine if you are needed to work that day.

To qualify for jury duty pay, you must provide your supervisor with a copy of the jury subpoena before leave is granted as well as any receipts or other records provided by the court showing the amount received as juror's fees, travel expenses, or other compensation provided by the court.

Your jury duty pay will be calculated at the rate of eight hours of straight time for each day absent. No overtime or holiday wages will be paid. All regular compensation received from the court will be deducted and you will be reimbursed the difference. You will not be entitled to jury duty pay for a period in excess of 80 scheduled work hours per calendar year.

14. If there is a paid holiday while you are on jury duty, will the company pay you overtime for that day?

15. How does this company determine your pay while you are on jury duty? Use your own words to answer.

16. If you normally work full time and are on jury duty for three weeks, for how many days will the company NOT pay you?

Read the attached notice on unemployment insurance to find the answers to these questions.

17. How do you think you could find out if you have sufficient earnings in your Base Period?

18. If you have been hurt and are on medical leave, can you receive unemployment benefits?

19. If you are fired for excessive absence without cause, can you receive unemployment benefits?

20. Where does the money come from that is used for unemployment benefits?

Place the letter of the correct word on the line in front of each definition. There are three extra words.

___ 21. printer's unit of measurement

___ 22. platform support for cut paper

___ 23. printed and folded sheet

___ 24. photograph reproduction through a contact screen

___ 25. printed piece put into a publication

A. blanket

B. dummy

C. halftone

D. insert

E. pica

F. signature

G. skid

WRITING III: Use the attached blank sheet to write a memo to your supervisor telling him you have been called for jury duty. Your department workload is very heavy.

UNEMPLOYMENT INSURANCE

TO EMPLOYEES

YOUR EMPLOYER IS SUBJECT TO the Maryland Unemployment Insurance Law and pays taxes under this law. No deduction is made from your wages for this purpose.

IF YOU ARE LAID OFF or otherwise become unemployed, go immediately to the nearest Department of Employment and Training office to register for work and to file your claim.

IF YOU ARE ELIGIBLE, you may be entitled to unemployment insurance benefits for as many as 26 weeks.

IF YOU ARE WORKING LESS THAN FULL TIME, you may be eligible for partial benefits. If your regular hours of work have been reduced, go promptly to the nearest office of the Department of Employment and Training to file your claim and to inquire about your benefit rights.

YOU ARE ENTITLED TO BENEFITS IF:

1. You are unemployed through no fault of your own.
2. You have sufficient earnings in your Base Period.
3. You have registered for work and have filed a claim for benefits at a Department of Employment and Training office.
4. You are able to work, available for work, and actively seeking work.

NOTE: To insure prompt handling of your claim, it is necessary to take your Social Security card with you.

WHETHER TOTALLY OR PARTIALLY UNEMPLOYED

For full information, go to your nearest Employment Department of Employment and Training Office.

READING/WRITING PRE-ASSESSMENT
ANSWER KEY

1. Take it to the plant manager or plant foreman.
2. year-to-date
3. outside diameter
4. at
5. a clear liquid
6. induce vomiting
7. carbon monoxide may be produced
8. rotated among all qualified employees in the same department and on the same shift.
9. the crew assigned to the equipment.
10. 60
11. 139
12. red one with short hose
13. red with short hose and nozzle
14. no
15. paid for 8 hours for each day on jury duty, minus the juror's fee.
16. 5 days
17. take pay slips to the Unemployment Office
18. no (you are unable to work)
19. no
20. taxes paid by employer
21. pica
22. skid
23. signature
24. halftone
25. insert

MATH PRE-ASSESSMENT

Name _____
Date _____
Company _____

PART ONE - COMPUTATION

Directions: Solve the following problems, showing your work on this paper.
CIRCLE your answers.

1) Subtract:

$279.86 from $500.00

2) Find the average of these numbers:

263, 487, 198,
224, 406, 354

3) Divide:

$6\overline{)4254}$

4) Add:

$\frac{5}{8} + \frac{7}{8}$

5) Subtract:

$$\begin{array}{r} \frac{9}{10} \\ -\ \frac{2}{5} \\ \hline \end{array}$$

6) Express as a decimal:

$\frac{3}{8}$

7) Multiply:

$$\begin{array}{r} 6{,}283 \\ \times\ 47 \\ \hline \end{array}$$

8) Divide and carry out answer to 2 decimal places:

$28\overline{)9690}$

9) Add:

$$\begin{array}{r} 4\frac{3}{4} \\ +\,1\frac{1}{3} \\ \hline \end{array}$$

10) Multiply:

$2\frac{2}{5} \times 2\frac{1}{4}$

11) Divide:

$4 \div \frac{1}{3}$

12) Add:

$.28 + 80.06 + 2.354$

13) Subtract:

$13.02 - .635$

14) What is 6% of 85

15) What percent of 32 is 24?

16) Multiply:

$$\begin{array}{r} 235.5 \\ \times\ .067 \\ \hline \end{array}$$

17) Divide and round answer to nearest tenth:

$.57\overline{)26}$

PART TWO - PROBLEM SLOVING
Directions: Solve these problems, showing your work on this paper.
CIRCLE your answers.

18) Mabel needed three pieces of pipe, measuring 3 ft. 6 in., 2 ft. 9 in. and 5 ft. 1 in. How much pipe did she need in all?

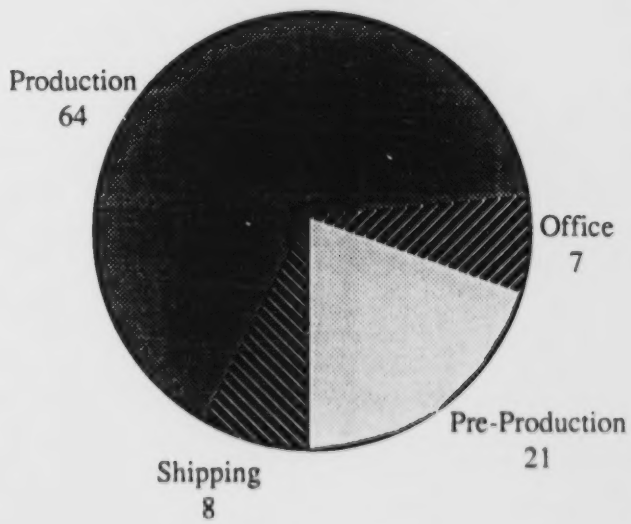
19) A printing job calls for mixing 2 colors of ink with a ratio of 5 parts of yellow to 12 parts of green. If the job calls for 30 lbs. of green, how many lbs. of yellow should be used?

Use the Graph of Employee Distribution to answer #20 & #21.

20) What percentage of employees work in production and shipping combined?

21) If Crabcake Machinery has 350 employees, how many people work in the Shipping Dept?

CrabCake Machinery
EMPLOYMENT DISTRIBUTION CHART
% per Department



22) Joe began a job at 7:45 a.m., and worked continually on it for 6 1/2 hours. He took a break from 12:00 to 12:30. What time did he finish the job?

23) A can of solvent costs $5.89. The Maintenance Dept. budget allows 1/6 of its annual budget of $550 for solvent. About how many cans will this buy?

24) Boxes which measure 1.2 meter in length and .6 meter in width are stored in an area 48 ft long and 24 ft wide. How many boxes will fill the area two layers deep? (1 meter = 39.37 inches)

25) Crabcake Machinery had gross sales last year of $4,900,000 last year with profits of $249,900. This year sales were $5,100,000 with profis of $275,4000. What was the difference in the percent of profits for this year over last year?

MATH PRE-ASSESSMENT
ANSWER KEY

1. $220.14
2. 322
3. 709
4. 1 1/2
5. 1/2
6. .375
7. 295,301
8. 346.07
9. 6 1/12
10. 5 2/5
11. 12
12. 82.694
13. 12.385
14. 5.1
15. 75%
16. 15.7785
17. 45.6
18. 11 ft.4 in.
19. 12.5 lbs.
20. 72%
21. 28
22. 2:45 PM
23. 15
24. 48
25. .3%

MATH POST-ASSESSMENT

Name _____
Date _____
Company _____

PART ONE - COMPUTATION
Directions: Solve the following problems, showing your work on this paper.
CIRCLE your answers.

1) Subtract $469.72 from $700

2) Find the average of theses numbers:

467, 529, 388, 406, 299, 353

3) Divide:

$7\overline{)5649}$

4) Add:

$$\begin{array}{r} 5/6 \\ +\ 5/6 \end{array}$$

5) Subtract:

$$\begin{array}{r} 7/8 \\ -\ 1/4 \end{array}$$

6) Express as a decimal:

5/8

7) Multiply:

$$\begin{array}{r} 7192 \\ \times\ 78 \end{array}$$

8) Divide and carry out answer to 2 decimal places:

$37\overline{)8590}$

9) Add:

$$\begin{array}{r} 6\ 2/3 \\ +\ 2\ 3/4 \\ \hline \end{array}$$

10) Multiply:

$$2\ 1/5 \times 3\ 3/4$$

11) Divide:

$$3 \div 1/6$$

12) Add:

.37, 70.83, 5.008

Subtract:

$$24.03 - .982$$

14) What is 12% of 35?

15) What percent of 85 is 51?

16) Multiply:

$$\begin{array}{r} 186.2 \\ \times\ .087 \\ \hline \end{array}$$

17) Divide and round your answer to the nearest tenth.

$$.67 \overline{)\ 28}$$

PART TWO - PROBLEM SOLVING

Directions: Solve these problems, showing your work on this paper.
CIRCLE your answers.

18. Joe needed three pieces of pipe, measuring 4 ft. 5 in., 3 ft. 8 in., and 2 ft. 6 in. How much did he need in all?

19. A painting job calls for mixing two colors of paint with a ratio of 5 parts blue to 8 parts white. If the job calls for 20 gallons of white, how many gallons of blue should be used?

20. From the graph, "Employment Distribution Chart", What percentage of employees work in Production and Pre-Production combined?

21. If Crabcake Industries has 400 employees, how many people work in the office?

22. Mary began a job at 8:15 AM that took 4 1/2 hours to complete. She took a break from 10:45 until 11:00. What time did she finish the job?

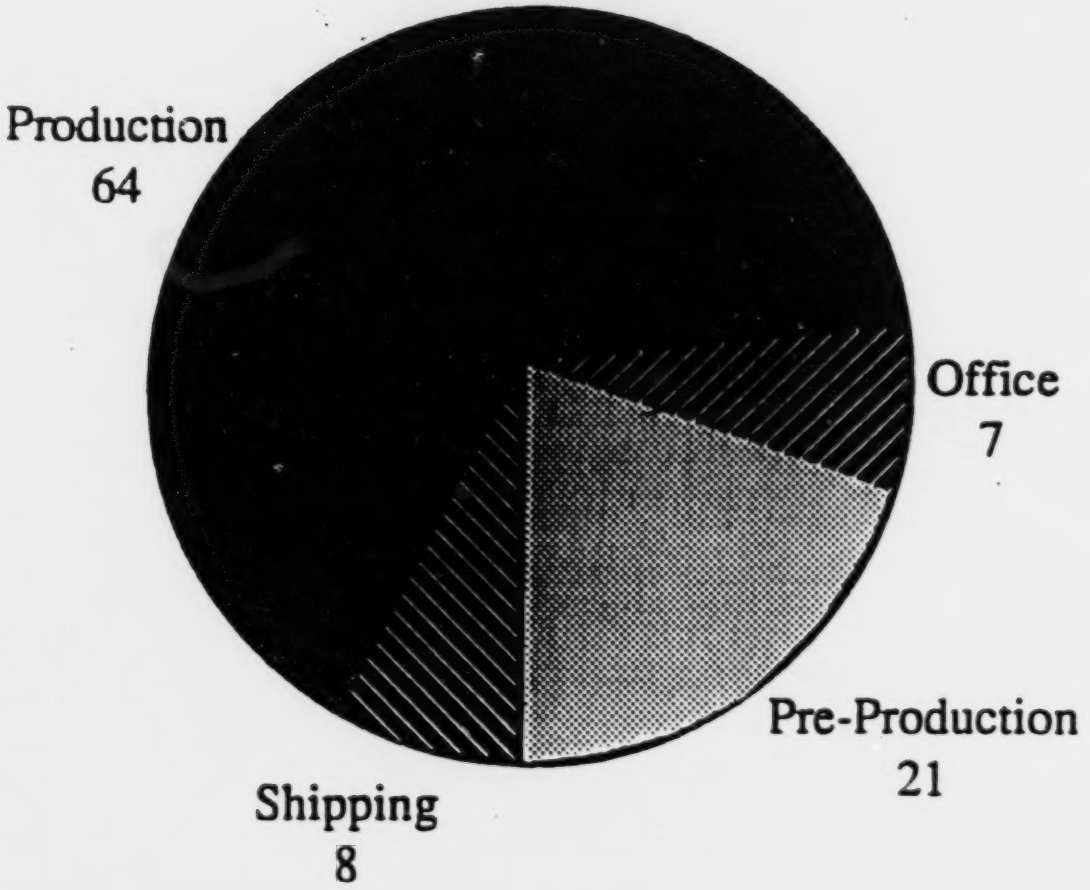
23. A box of computer diskettes cost $8.75. The Computer Department allows 1/8 of its annual budget of $5800 for diskettes. About how many boxes will this buy?

24. Boxes which measure 1.4m in length and .8m in width are stored in an area 25 ft. long and 9 ft. wide. How many boxes will fill the area three layers deep?
(1 meter = 39.37 inches)

25. Crabcake Industries had gross sales last year of $4,800,000 with sales expenses of $180,000. This year the gross sales were $5,200,000 and sales expenses were $190,000. What was the decrease in the percent that sales expenses were of the gross sales this year over last year?

(lweidner\mathpost.ass)

Crabcake Machinery
EMPLOYMENT DISTRIBUTION CHART
% per Department



MATH POST-ASSESSMENT
ANSWER KEY

1. Subtract $469.72 from $700. Ans: $230.28

2. Find the average of these numbers:
467, 529, 388, 406, 299, 353 Ans: 407

3. Divide
$7/\overline{5649}$ Ans: 807

4. Add:
$$\begin{array}{r} 5/6 \\ +\ 5/6 \\ \hline \end{array}$$
Ans: 1 2/3

5. Subtract:
$$\begin{array}{r} 7/8 \\ -\ 1/4 \\ \hline \end{array}$$
Ans: 5/8

6. Express as a decimal: 5/8 Ans: .675

7. Multiply:
$$\begin{array}{r} 7192 \\ \times\ 78 \\ \hline \end{array}$$
Ans: 560976

8. Divide and carry out answer to 2 decimal places:
$37/\overline{8590}$ Ans: 232.16

9. Add:
$$\begin{array}{r} 6\ 2/3 \\ +\ 2\ 3/4 \\ \hline \end{array}$$
Ans: 9 5/12

10. Multiply: 2 1/5 X 3 3/4 Ans: 8 1/4

11. Divide: 3 -- 1/6 Ans: 18

12. Add: .37, 70.83 and 5.008 Ans: 76.208

13. Subtract: 24.03 - .982 Ans: 23.048

14. What is 12% of 35 Ans: 4.2

15. What percent of 85 is 51? Ans: 60%

16. Multiply: 186.2
X .087
———
Ans: 15.1994

17. Divide and round answer to the nearest tenth: .67/28 Ans: 41.8

18. Joe needed three pieces of pipe, measuring 4 ft. 5 in, 3 ft. 8 in., and 2 ft. 6 in. How much did he need in all? Ans: 10 ft. 7 in.

19. A painting job calls for mixing two colors of paint with a ratio of 5 parts of blue to 8 parts of white. If the job calls for 20 gallons of white, how many gallons of blue should be used? Ans: 12 1/2 gal.

20.From the graph "Employment Distribution Chart, what percentage of employees work in Production and Pre-Production combined? Ans: 85%

21. If Crabcake Industries has 400 employees, how many people work in the office? Ans: 28

22. Mary began a job at 8:15 AM that took 4 1/2 hours to complete. She took a break from 10:45 until 11:00. What time did she finish the job? Ans: 1:00 PM

23. A box of computer diskettes costs $8.75. The Computer Dept. allows 1/8 of its annual budget of $5800. for diskettes. About how many boxes will this buy? Ans: 80 boxes

24. Boxes which measure 1.4 m. in length and .8 m. in width are stored in an area 25 ft. long and 9 ft. wide. How many boxes will fill the area three layers deep? Ans: 45 boxes

25. Crabcake Industries had gross sales last year of $4,800,000 with sales expenses of $180,000. This year the gross sales were $5,200,000 and sales expenses were $190,000. What was the decrease in the percent that sales expenses were of gross sales this year over last year?
Ans: .1%

READING/WRITING
POST-ASSESSMENT

Competency: Read workplace materials to follow directions.

Objective: Apply a set of directions to workplace activities.

Directions: Read the "Duties of a Truck Drive" to find the answer to this question.

DUTIES OF A TRUCK DRIVER

* Check today's box and line up all tickets for one direction.
* Be pleasant and courteous to customers. You are a company salesman and you should represent your company well.
* Before leaving, check oil, battery and tires.
* Call in at least once incase we have to give you instructions.
* Get credit cards in morning and return after the day's deliveries.
* Make sure you have maps of the area you will be delivering in.
* Follow schedule as fast and close as possible. Be sure to return by 4:30 even if it means missing a few deliveries.
* NEVER PICK UP ANYONE ON THE ROAD.
* If you are low on gas when returning, fill up the tank.

1. List the things the truck driver should do before he or she leaves the plant in the morning.

WRITING I - Telephone Message Form

Joan Madison, of Ross Brothers (555-6300) calls to speak to Ed Jefferson. She says, "Tell Ed that our people made a mistake on the quantity of order #61542. He should talk to me before filling the order. If it has gone out already, have him call me. My phone # is 2457.
Fill out the form below with this message.

Write the complete word for these abbreviations. (Don't worry about spelling.)

2. N/A
3. Ext.
4. Attn.

Drydene Material Safety Data Sheet

Use the attached Material Safety Data Sheet to answer these questions.

5. What does this material smell like?

6. How dangerous is it to swallow this material?

7. Will this material dissolve in water?

Overtime: Read the company rules about overtime to answer these questions.

8. In a certain week you work two 8 hour days and take off two days for vacation. On Friday, you work your regular 8 hour shift plus 4 hours overtime. For how many hours will you be paid this week?

9. In a certain week you work five 8 hour days plus 4 hours on Saturday and 4 hours on Sunday. For how many hours will you be paid for this week?

WRITING II - For the week described in Question #9 you are paid for only 40 regular hours. In the space below write a note to Payroll pointing out this error.

Yellow Pages: Scan the Yellow Pages Index to find this information.

10. You want to buy a trailer for one of the company trucks. One what page will you find this?

11. Your truck is out of service and you need to hire a company to make some deliveries for you. On what page will you find this?

12. You are at the point marked X. Exits A and B are blocked. What is your nearest exit?

13. You are at the point marked Y. Exits H and I are blocked. What is your nearest exit?

14. If you put an out-of-town letter in outgoing mail at 1:00 PM, when will it be picked up?

15. What are the receptionist's two responsibilities in mail procedures?

16. You are the person designated to pick up mail for your department. When would be the best times to pick it up?

DISTRIBUTION OF OVERTIME

The Company will distribute overtime as uniformly as practicable among qualified employees within a department, on a shift, within a job classification.

A. Preference will be given for occasional daily overtime to the employee who has worked all day on the job involved. Preference will be given for scheduled overtime from Monday through Friday to the crew that the Company assigned to the equipment.

B. All overtime hours are to be recorded and kept posted up-to-date by Tuesday of each week in all departments. Duplicate copies of all recorded overtime to be furnished each chief steward and chairman of Grievance Committee. All departments' recorded overtime will be reviewed at the regular monthly grievance meeting by the Industrial Relations Manager and the Grievance Committee.

C. Overtime will be rotated among all qualified departmental employees on the shift until each has been offered one turn, after which rotation will start anew. The qualified department employee requested to work will be the employee with the lowest amount of recorded overtime. Should additional employees be needed to fulfill the overtime requirements, they shall be selected from the plant list within the shift and job classification concerned.

DUTIES OF A TRUCK DRIVER

* Check today's box and line up all tickets for one direction.
* Be pleasant and courteous to customers. You are a company salesman and you should represent your company well.
* Before leaving, check oil, battery, and tires.
* Call in at least once in case we have to give you instructions.
* Get credit cards in morning and return after the day's deliveries.
* Make sure you have maps of the area you will be delivering in.
* Follow schedule as fast and close as possible. Be sure to return by 4:30 even if it means missing a few deliveries.
* NEVER PICK UP ANYONE ON THE ROAD.
* If you are low on gas when returning, fill up the tank.

BEST COPY AVAILABLE

711
ADMIRAL ENVL & PRINT CO
1700 N. FULTON AVENUE
BALTIMORE, MD. 21217

MATERIAL SAFETY DATA SHEET

Date Issued: 10/23/87

Section A — IDENTIFICATION & EMERGENCY INFORMATION

Manufacturer's Name: **DRYDEN OIL COMPANY** Address: **9300 Pulaski Highway**
Emergency Telephone Number: **301-574-5000** **Baltimore, Maryland 21220**

Product Name: DRYDENE SUPREME XHD MOTOR OIL
10W, 20W-20, 30, 40, 50

Chemical Name: **PETROLEUM LUBRICATING OIL**

CAS Number:
COMPLEX MIXTURE
CAS Number Not Applicable

Product Appearance & Odor:

CLEAR, DARK AMBER LIQUID
MILD, BLAND PETROLEUM ODOR

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health 1	Flammability 1	Reactivity 0

HAZARD RATING: Least-0 Slight-1 Moderate-2 High-3 Extreme-4

SECTION B — COMPONENTS & HAZARD INFORMATION

COMPONENTS	CAS NO. OF COMPONENTS	APPROXIMATE CONCENTRATION
Lubricating Oil Base Stock	64742-54-7 64741-88-4	GREATER THAN 85%
Proprietary Additives	Mixture	LESS THAN 15%

Exposure Limit for Total Product: 5mg/m^3 oil mist Basis: OSHA Reg 29 CFR 1910.1000

EXPOSURE EFFECTS: EYE—Slight Irritation, SKIN—Slight irritation, INGESTION—Relatively non-toxic

THIS PRODUCT IS *NOT* CONSIDERED HAZARDOUS BY OSHA IN ACCORDANCE WITH 29 CFR 1910.1200 OSHA COMMUNICATION STANDARD

SECTION C — PHYSICAL DATA

THE FOLLOWING DATA ARE APPROXIMATE OR TYPICAL VALUES.

Boiling Range: Not Determined

Specific Gravity (H_2O=1): 0.8927/0.8984

Pour Point: -34.C/-12.C

Viscosity: 100.C CST 6.90/18.4

Solubility in Water: Negligible, Below 0.1%

Percent Volatile by Volume: NEGLIGIBLE

Vapor Pressure: NEGLIGIBLE

Vapor Density: GREATER THAN AIR

Evaporation Rate: NEGLIGIBLE

SECTION D — FIRE PROTECTION INFORMATION

FLASH POINT & METHOD: Min. ASTM D-92 C.O.C. °C.(°F.)

204(400)/232(450)

AUTOIGNITION TEMPERATURE:
NOT DETERMINED

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) — Hazard Identification

Health—1
Flammability—1
Reactivity—0

Basis: Recommended by Dryden Oil Co.
HAZARD RATING (NFPA):
4-Extreme 3-High 2-Moderate
1-Slight 0-Insignificant

UNUSUAL FIRE & EXPLOSION HAZARDS:

NONE

FLAMMABLE LIMITS or EXPLOSIVE LIMITS: (Approximate Percent By Volume In Air)
THESE ARE *ESTIMATED* VALUES.
LOWER FLAMMABLE LIMIT— 0.9% *UPPER* FLAMMABLE UNIT— 7%

52 (01) BALTIMORE, MARYLAND 16 (OVER)

1011

OVERTIME

In addition to providing a quality product, our jobs depend upon our ability to meet production schedules. Overtime hours are often required to serve our customers.

Employee commitment to daily and weekly overtime is a necessary condition of employment at Port-City Press. Your willingness to work overtime is a factor considered during the performance appraisal process.

All approved paid time-off (except disability or sick leave) that occurs during the regular workweek will be counted as hours worked when computing overtime.

HOURLY employees will be paid overtime rates according to the following guidelines:

Overtime hours will be computed on the basis of one and one-half times your straight time hourly rate for:

- All hours worked in excess of your regular shift (8 paid straight time hours) during any weekday (Monday through Friday).
- All hours worked in excess of your regularly scheduled workweek (40 paid straight time hours) on the sixth workday of the week.

Overtime hours will be computed on the basis of two times your straight time hourly rate for:

- All hours worked on the seventh day providing 40 straight time hours have been paid during the same workweek.

  On the seventh day, you will not be paid for more hours at double time than you were paid on the sixth day without specific advance authorization from your supervisor. The seventh day normally begins at 11 PM on Saturday night for third shift employees and at 7 AM on Sunday for first and second shift employees.

- All hours worked on a company holiday, providing certain "holiday weekend" conditions have been met.

  If you are requested to work on a company holiday, you will be paid two times your straight time rate plus holiday pay. If schedule requirements are such that any holiday weekend days can be worked, the first overtime day will be at time and one-half and subsequent days will be at double time.

  For example, if a company-paid holiday falls on a Friday and you are asked to work on Saturday but elect to work on Friday, overtime will be paid at time and one-half plus holiday pay. If you work on Friday and Saturday, Friday will

Inspection

The Act requires that a representative of the employer and a representative authorized by the employees be given an opportunity to accompany the OSHA inspector for the purpose of aiding the inspection.

Where there is no authorized employee representative, the OSHA Compliance Officer must consult with a reasonable number of employees concerning safety and health conditions in the workplace.

Complaint

Employees or their representatives have the right to file a complaint with the nearest OSHA office requesting an inspection if they believe unsafe or unhealthful conditions exist in their workplace. OSHA will withhold, on request, names of employees complaining.

The Act provides that employees may not be discharged or discriminated against in any way for filing safety and health complaints or for otherwise exercising their rights under the Act.

Employees who believe they have been discriminated against may file a complaint with their nearest OSHA office within 30 days of the alleged discrimination.

Citation

If upon inspection OSHA believes an employer has violated the Act, a citation alleging such violations will be issued to the employer. Each

doubles these maximum penalties.

Voluntary Activity

While providing penalties for violations, the Act also encourages efforts by labor and management, before an OSHA inspection, to reduce workplace hazards voluntarily and to develop and improve safety and health programs in all workplaces and industries. OSHA's Voluntary Protection Programs recognize outstanding efforts of this nature.

Such voluntary action should initially focus on the identification and elimination of hazards that could cause death, injury, or illness to employees and supervisors. There are many public and private organizations that can provide information and assistance in this effort, if requested. Also, your local OSHA office can provide considerable help and advice on solving safety and health problems or can refer you to other sources for help such as training.

Consultation

Free consultative assistance, without citation or penalty, is available to employers, on request, through OSHA supported programs in most State departments of labor or health.

More Information

Additional information and copies of the Act, specific OSHA safety and health standards, and other applicable regulations may be obtained from your employer or from the nearest OSHA Regional Office in the following locations:

Atlanta, Georgia
Boston, Massachusetts
Chicago, Illinois
Dallas, Texas
Denver, Colorado
Kansas City, Missouri
New York, New York
Philadelphia, Pennsylvania
San Francisco, California
Seattle, Washington

Telephone numbers for these offices, and additional area office locations, are listed in the telephone directory under the United States Department of Labor in the United States Government listing.

Washington, D.C.
1985
OSHA 2203

William E. Brock, Secretary of Labor

U.S. Department of Labor
Occupational Safety and Health Administration

223

Under provisions of Title 29, Code of Federal Regulations, Part 1903.2(a)(1) employers must post this notice (or a facsimile) in a conspicuous place where notices to employees are customarily posted.

224

JOB SAFETY & HEALTH PROTECTION

The Occupational Safety and Health Act of 1970 provides job safety and health protection for workers by promoting safe and healthful working conditions throughout the Nation. Requirements of the Act include the following:

Employers

All employers must furnish to employees employment and a place of employment free from recognized hazards that are causing or are likely to cause death or serious harm to employees. Employers must comply with occupational safety and health standards issued under the Act.

Employees

Employees must comply with all occupational safety and health standards, rules, regulations and orders issued under the Act that apply to their own actions and conduct on the job.

The Occupational Safety and Health Administration (OSHA) of the U.S. Department of Labor has the primary responsibility for administering the Act. OSHA issues occupational safety and health standards, and its Compliance Safety and Health Officers conduct jobsite inspections to help ensure compliance with the Act.

Inspection

citation will specify a time period within which the alleged violation must be corrected.

The OSHA citation must be prominently displayed at or near the place of alleged violation for three days, or until it is corrected, whichever is later, to warn employees of dangers that may exist there.

Proposed Penalty

The Act provides for mandatory penalties against employers of up to $1,000 for each serious violation and for optional penalties of up to $1,000 for each nonserious violation. Penalties of up to $1,000 per day may be proposed for failure to correct violations within the proposed time period. Also, any employer who willfully or repeatedly violates the Act may be assessed penalties of up to $10,000 for each such violation.

Criminal penalties are also provided for in the Act. Any willful violation resulting in death of an employee, upon conviction, is punishable by a fine of not more than $10,000, or by imprisonment for not more than six months, or by both. Conviction of an employer after a first conviction doubles these maximum penalties.

32235 © The Chesapeake and Potomac Telephone Company of Maryland 1991

SYNAGOGUES—
Conservative ... 1016
Independent ... 1016
Jewish ... 1016
Orthodox ... 1016
Reconstructionist ... 1016
Reform ... 1016
Traditional ... 1016
SYNOGOGUES—
Messianic ... 1016

T

T-Shirts ... 1016
TABLE
Decorations-Rentals—See
Party Supplies—Renting ... 740
Pads ... 1017
TABLES—Folding ... 1017
TABS-Index—See
Office Supplies ... 715
Stationers—Retail ... 996
TABULATING Service—See
Bookkeeping Service ... 196
TAE Kwon Do—See
Karate & Other Martial Arts Instruction ... 547
TAILORS ... 1018
TALENT
Agencies—See
Theatrical Agencies ... 1037
Agencies & Brokers—See
Entertainers ... 377
Entertainment Bureaus ... 379
Theatrical Agencies ... 1037
TANNING
Centers—See
Health Clubs ... 457
Salons ... 1019
Salons Equipment & Supplies—Retail ... 1019
TAPE
Recorders & Players—Sound—Dealers ... 1019
Recorders & Players—Sound—Service & Repair ... 1019
Recordings-Duplication Service—See
Recording Service—Sound & Video ... 900
TARPAULINS ... 1019
TATTOOING ... 1019
TAVERNS ... 1019
TAX
Matters—See
Accountants ... 37
Accountants—Certified Public ... 38
Bookkeeping Service ... 196
Lawyers ... 574
Reporting Service—Personal ... 1021
Return Preparation—Personal ... 1021
TAXES—Consultants & Representatives ... 1022
TAXICABS ... 1022
TAXIDERMISTS ... 1023
TEA Rooms—See
Restaurants ... 913
TEEN-Age Activities—See
Youth Organizations & Centers ... 1133
TELECOMMUNICATIONS—See
Radio Communication Equipment & Systems ... 885
Telegraph Service ... 1023
Telephone Equipment & Systems—Dealers ... 1028
TELEGRAMS—Novelty ... 1023
TELEGRAPH Service ... 1023
TELEMARKETING—See
Telephone Communications Services ... 1027
TELEPHONE
Answering Service ... 1023
Automatic Answering Equipment & Systems—Residential ... 1026
Calling Service—See
Personal Service Bureaus ... 748
Communications Services ... 1027
TELEPHONE
Companies ... 1027
Equipment-Mobile—See
Radio Communication Equipment & Systems ... 885
Equipment & Systems—Dealers ... 1028
Equipment & Systems—Service & Repair ... 1030
Equipment & Systems—Supplies & Parts ... 1030
Installation—See
Telephone Equipment & Systems—Service & Repair ... 1030
Planning Service—See
Telephone Companies ... 1027
Secretarial—See
Telephone Answering Service ... 1023
Wake-Up Service—See
Wake-Up Call Service ... 1103
TELESCOPES ... 1030
TELEVISION
Antenna Systems—See
Antennas ... 68
Broadcasting Companies—See
Television Stations & Broadcasting Companies ... 1035
Cable, CATV & Satellite—Residential ... 1030
Casting Agencies—See
Theatrical Agencies ... 1037
Dealers-Giant Screen—See
Television & Radio—Dealers ... 1031
Program Subscription Service ... 1031
& Radio Broadcasting Schools ... 1031
& Radio—Dealers ... 1031
& Radio—Renting & Leasing ... 1031
& Radio—Service & Repair ... 1032
& Radio—Supplies & Parts—Retail ... 1035
Stations & Broadcasting Companies ... 1035
TELEX Communication Services—See
Electronic Mail Service ... 368
TEMPORARY Help
Contractors—See
Employment Contractors—Temporary Help ... 372
TENNIS
Clubs—See
Clubs ... 276
Court Construction ... 1035
Courts—Private ... 1035
Equipment & Supplies ... 1035
Instruction ... 1035
TENTS ... 1035
Renting ... 1036
Repairing—See
Luggage—Repairing ... 646
Tents ... 1035
TERRY Cloth—See
Fabric Shops ... 383
TEST Preparation-Academic—See
Schools—College Board Preparation ... 950
Tutoring ... 1084
TESTING-Personnel—See
Personnel Consultants ... 748
THEATER Production Companies—See
Theatrical Agencies ... 1037
THEATRE Equipment—See
Theatrical Equipment & Supplies ... 1037
THEATRES ... 1037
THEATRICAL
Agencies ... 1037
Equipment & Supplies ... 1037
Make-Up—Retail ... 1037
THERAPISTS-Mental Health—See
Mental Health Services ... 664
THRIFT Shops ... 1037
TICKET Sales—Entertainment & Sports ... 1038
TILE—
Ceramic—Contractors & Dealers—Residential ... 1038
Non-Ceramic—Contractors & Dealers—Residential ... 1040
Setting Materials—See
Cement—Retail ... 238
TILLERS-Garden—See
Lawn Mowers ... 571
TIRE
Dealers ... 1040
Disposal—See
Automobile Wrecking ... 149
Junk Dealers ... 547
Recycling Centers ... 904
Rubbish & Garbage Removal—Residential ... 941
Retreading & Repairing ... 1045
TITLE Companies ... 1046
TOASTERS-Repairing—See
Appliances—Household—Small—Service & Repair ... 82
TOBACCO-
Retail—See
Cigar, Cigarette & Tobacco Dealers—Retail ... 269
Retail-Wholesale—See
Cigar, Cigarette & Tobacco Dealers—Retail ... 269
TOILET Seats ... 1048
TOILETS—Portable—Household ... 1048

INDEX

Classifications listed in this Directory are for those products and services used primarily for retail and residential buying.

Classifications used for business to business buying can be found in the C&P Business to Business directory. If you need this directory, call your local C&P business office.

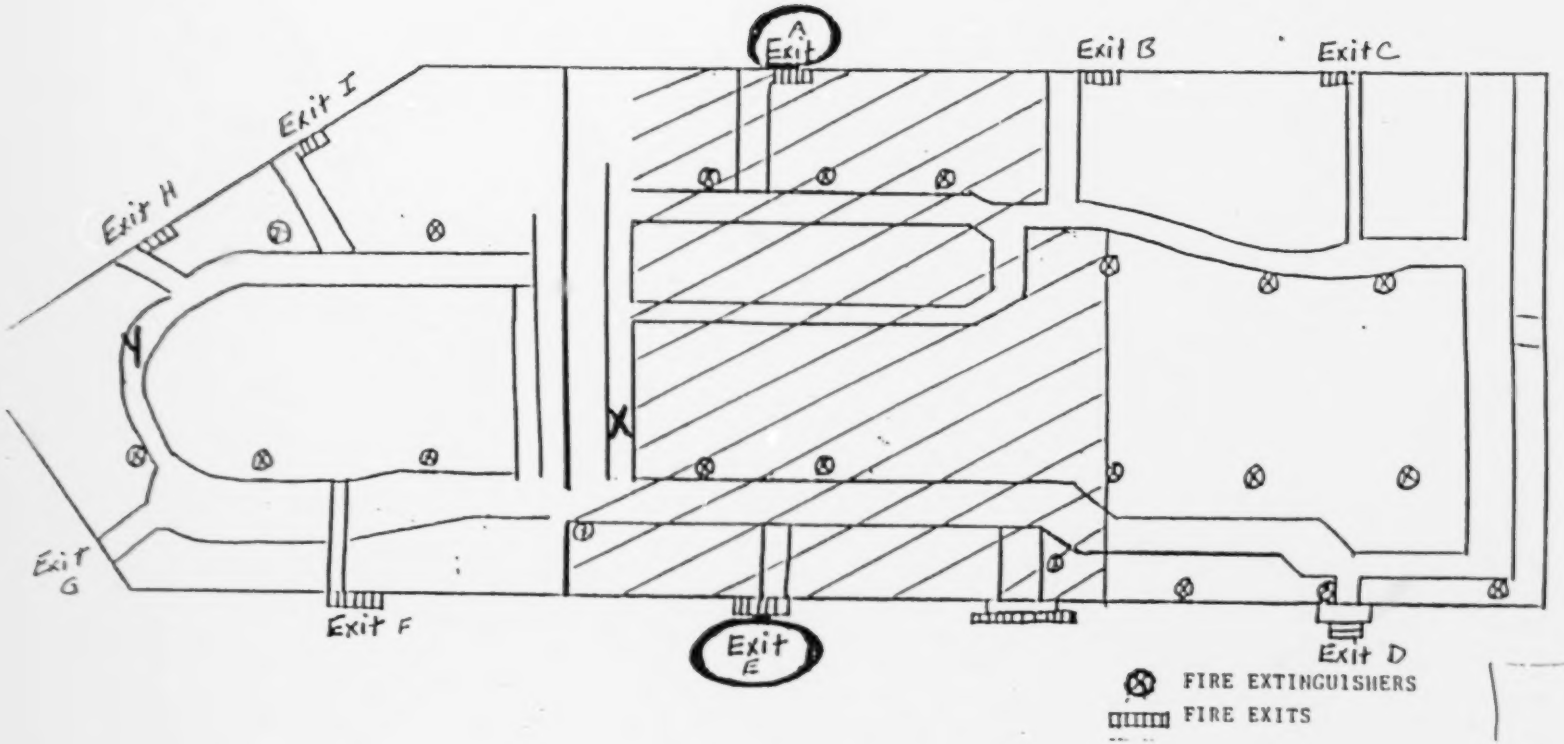
TOMBSTONES—See
Monuments ... 671
TONING Systems—See
Exercise & Physical Fitness Programs ... 383
Health Clubs ... 457
Tanning Salons ... 1019
TOOLS—
Electric ... 1048
Hand ... 1049
Renting ... 1049
TOPSOIL ... 1049
TOUPEES—See
Hair Replacement ... 453
TOURIST
Agencies—See
Travel Agencies & Bureaus ... 1063
Information ... 1050
TOURS—See
Sightseeing Tours ... 979
Travel Agencies & Bureaus ... 1063
Operators & Promoters ... 1050
TOWING—
Automotive ... 1050
Boats—See
Boat Dealers ... 190
Boat Transporting ... 194
Equipment—Automotive ... 1053
TOYS—
Repairing ... 1053
Retail ... 1053
TRACTORS—Lawn & Garden—Dealers ... 1054
TRADE Associations ... 87
TRAILER
Hitches ... 1054
& Mobile Home Parks—See
Mobile Homes—Parks ... 668
Renting & Leasing ... 1055
Storage ... 1056
TRAILERS—
Automotive Utility ... 1056
Boat ... 1057
Commercial—See
Mobile Homes—Dealers ... 668
Trailers—Truck ... 1057
Equipment & Parts ... 1057
Horse ... 1057
Office—See
Mobile Homes—Dealers ... 668
Repairing & Service ... 1057
Truck ... 1057
TRAINS—See
Railroads ... 888
Railroads—Ticket Agencies ... 888
Toy—See
Hobby & Model Construction Supplies—Retail ... 476
Toys—Retail ... 1053
TRAMPOLINE Equipment & Supplies ... 1057
TRANSCRIBING Service—See
Secretarial Services ... 959
TRANSFER
Companies—See
Express & Transfer Service ... 383
& Express—See
Express & Transfer Service ... 383
TRANSFORMATIONS—See
Hair Replacement ... 453
TRANSLATORS & Interpreters ... 1057
TRANSMISSIONS—Automobile ... 1057
TRAPPING Equipment & Supplies ... 1063
TRAVEL
Accessories—See
Gift & Specialty Shops ... 434
Leather Goods—Dealers ... 625
Luggage—Retail ... 646
Maps—Dealers ... 651
Pharmacies ... 764
Variety Stores ... 1091
Agencies & Bureaus ... 1063
Escorts ... 1070
TRAVELERS Checks Issued ... 1070
TRAVERSE Rods—See
Drapery & Curtain Fixtures ... 357
TREE Service ... 1070
TRIMMERS—See
Lawn Mowers ... 571
TROPHIES ... 1074
TROPICAL Fish ... 1074
TRUCK
Alarm Systems—See
Burglar Alarm Systems ... 207
Bed Liners—See
Truck Caps & Shells ... 1075
Truck Equipment & Parts ... 1078
Caps & Shells ... 1075
Conversions & Accessories—See
Van Conversions & Accessories ... 1090
Covers—See
Tarpaulins ... 1019
Cushions—See
Automobile Seat Covers, Tops & Upholstery ... 147
Cushions ... 306
Dealers ... 1076
Doors—See
Truck Equipment & Parts ... 1078
Drive Shafts—See
Truck Equipment & Parts ... 1078
Driving Instruction—See
Driving Instruction ... 357
Equipment & Parts ... 1078
Forwarding—See
Automobile Transporters & Drive-Away Companies ... 149
Frame & Axle Repairing—See
Wheel Alignment, Frame & Axle Servicing—Automotive ... 1123
TRUCK
Leasing—See
Truck Renting & Leasing ... 1078
Lubricating Service—See
Service Stations—Gasoline & Oil ... 966
Truck Repairing & Service ... 1082
Renting & Leasing ... 1078
Repairing & Service ... 1082
Springs—See
Springs—Automotive—Sales & Service ... 994
Stops ... 1084
Towing—See
Towing—Automotive ... 1050
Transporting—See
Automobile Transporters & Drive-Away Companies ... 149
Upholstering—See
Automobile Seat Covers, Tops & Upholstery ... 147
Washing & Cleaning ... 1084
TRUCKERS-Moving—See
Express & Transfer Service ... 383
TRUCKING—Light Hauling ... 1084
TRUCKS-Trailers—See
Trailers—Truck ... 1057
TRUNKS—See
Luggage—Retail ... 646
TRUSSES—Medical & Surgical ... 1084
TRUST Companies ... 1084
TUNE-Ups-Automotive—See
Automobile Repairing & Service ... 134
TURF—See
Sod & Sodding Service ... 990
Equipment & Supplies—See
Lawn & Garden Equipment & Supplies ... 568
TURKISH Baths—See
Baths ... 173
TUTORING ... 1084
TUXEDOS—See
Department Stores ... 341
Formal Wear—Rental & Sales ... 413
Mens Clothing & Furnishings—Retail ... 663
TYPEWRITERS ... 1084
Supplies & Attachments ... 1085
TYPING Service ... 1085

U

UMBRELLAS—Retail ... 1085
UNDERTAKERS & Embalmers—See
Funeral Directors ... 417
UNFINISHED Furniture—See
Furniture—Unfinished ... 430
UNIFORMS—
Accessories—Retail ... 1085
Retail ... 1085
UNIONS—Labor—See
Labor Organizations ... 561
UNIVERSITIES—See
Schools—Universities & Colleges (Academic) ... 954
UNPAINTED Furniture—See
Furniture—Unfinished ... 430
UPHOLSTERERS ... 1086
Automobile—See
Automobile Seat Covers, Tops & Upholstery ... 147
UPHOLSTERY Fabrics—Retail ... 1088
USED Car Dealers—See
Automobile Dealers—Used Cars ... 109
UTILITY Trailers—See
Trailer Renting & Leasing ... 1055
Trailers—Automotive Utility ... 1056
Trailers—Truck ... 1057

BEST COPY AVAILABLE

FIRE EVACUATION PLAN



To apply for a posted opening, simply write a note to your supervisor expressing your interest in the position. Your supervisor, in turn, will send the note to Human Resources, who will arrange for an interview with you.

To be eligible for consideration, you must have been in your current job for a period of one year or more, be in good standing, and have a current performance appraisal on file which is good or better.

Employment of Relatives and Friends

[redacted] will consider applications for employment from relatives and friends of present employees. However, as an equal opportunity employer, the company will recruit, hire, train, promote, and transfer on the basis of qualifications. Under no circumstances will relatives or friends be given special or preferential treatment.

In order to avoid any possible conflict and/or raise the issue of preferential treatment, these guidelines will be followed:

- Individuals cannot directly supervise or be directly supervised by a close family member (defined as spouse, child, parent, parent-in-law, brother, sister, or other household members such as stepbrother, stepsister and/or close personal friends).

- If two individuals reporting to the same supervisor marry, one of those individuals should make every effort to find suitable employment elsewhere in the company. If no suitable employment is found, the company may request that one of the individuals seek employment outside of the company.

READING/WRITING
POST ASSESSMENT

Read the "Duties of a Truck Driver" to find the answer to this question.

1. List the things the truck driver should do before he or she leaves the plant in the morning.

Ans: check today's box, line up tickets, check oil, battery and tires, get credit cards

WRITING I - Telephone Message Form

Joan Madison, of Ross Brothers (555-6300) calls to speak to Ed Jefferson. She says, "Tell Ed that our people made a mistake on the quantity of order # 61542. He should talk to me before filling the order. If it has gone out already, have him call me. My phone is 2457."

Fill out the form below with this message.

Write the complete word for these abbreviations. (Don't worry about spelling.)

2. N/A — Ans: not applicable
3. Ext. — Ans: extension
4. Attn. — Ans: attention

Drydene Material Safety Data Sheet

Use the attached Material Safety Data Sheet to answer these questions.

5. What does this material smell like?

Ans: mild, bland petroleum odor

6. How dangerous is it to swallow this material? Ans: nct very dangerous

7. Will this material dissolve in water? Ans: No

Overtime: Read the company rules about overtime to answer these questions.

8. In a certain week you work two 8 hour days and take off two days for vacation. On Friday you work your regular 8 hour shift plus 4 hours overtime. For how many hours will you be paid this week? Ans:46 hrs.

OSHA: Read the Job Safety and Health Protection notice to find the answers to these questions.

17. What two things have to be included in an OSHA citation against an employer? Ans.: list of violations, time period to correct them

18. What is the difference in penalties for serious and nonserious violations? Ans.: Serious - mandatory fine, nonserious- optional

19. What help can employers get through their State Health Department? Ans.: free consultative assistance

20. What two protections are guaranteed to an employee who files a complaint against his company?
Ans.: name can be withheld, he may not be discriminated against

WRITING III You are the supervisor of two employees who have announced their plans to get married. Read the information from the handbook, "Employment of Relatives and Friends" and write a memo to the two workers summarizing the rules in your own words.

EXHIBIT F

Skills for TODAY and TOMORROW
Catonsville Community College & PIMA&BP
A Partnership For The Future.

INDIVIDUAL LEARNING PLAN

NAME_____ INSTRUCTOR_____

SS #_____ EMPLOYER_____

DATE ENTERED PROGRAM_____ COURSE/SECTION #_____

****

ASSESSMENT

CASAS	READING	MATH
Appraisal	_____	_____
Level	_____	_____
Pre	_____	_____
Post	_____	_____

Learning Style_____

PROGRAM LEVEL _____

OTHER DIAGNOSTIC INFORMATION:

****

STUDENT GOALS:

INSTRUCTOR COMMENTS:

SKILLS/COMPETENCY NEEDS	APPROACH/MATERIALS	STARTED	MASTERED

I have met with my instructor and we have discussed the above proposed program for my instruction. I will attend class regularly and work with my instructor to reach these goals.

Student Signature _____ Date _____

Instructor Signature _____ Date _____

EXHIBIT G

SKILLS TODAY FOR TOMORROW
LEVEL 1 COMPETENCY PROFILE

	MASTERY ON ENTRY	DATE OF MASTERY
READING COMPETENCIES		
1 READ & INTERPRET JOB-SPECIFIC VOCABULARY		
2 FIND INFORMATION IN ALPHABETICAL ORDER		
3 READ & INTERPRET INFORMATION FROM WRITTEN MATERIAL		
4 READ AND FOLLOW DIRECTIONS		
5 READ AND INTERPRET SEQUENTIAL DIRECTIONS		
6 USE TABLE OF CONTENTS, INDEX, AND APPENDICES		
7 READ & INTERPRET CHARTS, GRAPHS, TABLES		
8 READ & INTERPRET MAPS, DIAGRAMS, ILLUSTRATIONS, & BLUEPRINTS		
9 READ & INTERPRET NOTICES ABOUT SAFETY, RULES, & PROCEDURES		
10 READ & INTERPRET PROCEDURES FOR REPORTING ACCIDENTS & EMERGENCIES		
11 READ & INTERPRET DIRECTIONS FOR USING EQUIPMENT & MATERIALS		

MATHEMATICS COMPETENCIES		
1 ADD, SUBTRACT, MULTIPLY, DIVIDE WHOLE NUMBERS		
2 ADD, SUBTRACT, MULTIPLY, DIVIDE FRACTIONS/MIXED NUMBERS		
3 ADD, SUBTRACT, MULTIPLY, DIVIDE USING DECIMALS		
4 ADD, SUBTRACT, MULTIPLY, DIVIDE USING PERCENTAGES		
5 DETERMINE EQUIVALENTS BY CONVERTING FRACTIONS, DECIMALS, PERCENTAGES		
6 COMPUTE AVERAGES USING WHOLE NUMBERS, FRACTIONS, DECIMALS, PERCENTAGES		
7 DETERMINE APPROXIMATIONS BY ESTIMATING, ROUNDING, & JUDGING ANSWER VALIDITY		
8 INTERPRET RATIO AND PROPORTION		
9 INTERPRET DATA FROM GRAPHS AND CHARTS		
10 CALCULATE TIME		
11 PERFORM BASIC MEASUREMENT TASKS		
12 USE MEASUREMENT INSTRUMENTS & INTERPRET READINGS		
13 SOLVE MEASUREMENT PROBLEMS IN ENGLISH OR METRIC UNITS		

WRITING COMPETENCIES		
1 PRINT OR WRITE LEGIBLY		
2 USE STANDARD ENGLISH MECHANICS		
3 RECORD INFORMATION ON WORK FORMS, CHARTS, GRAPHS		
4 WRITE ABBREVIATIONS SPECIFIC TO THE JOB		
5 WRITE INFORMATION IN CLEAR, LOGICAL, & COMPLETE MANNER		
6 TAKE ACCURATE TELEPHONE MESSAGES		
7 WRITE SHORT NOTES AND/OR SIMPLE MEMOS		
8 WRITE LETTERS USING CORRECT STRUCTURE & SENTENCE STYLE		

PARTICIPANT NAME_____ DATE ENTERED_____

COMPANY_____

BEST COPY AVAILABLE

SKILLS TODAY FOR TOMORROW
LEVEL 2 COMPETENCY PROFILE

	MASTERY ON ENTRY	DATE OF MASTERY
MATHEMATICS COMPETENCIES		
1 WRITE & SOLVE RATIOS AND PROPORTIONS		
2 ADD, SUBTRACT, MULTIPLY, DIVIDE FRACTIONS & MIXED NUMBERS		
3 PERFORM OPERATIONS WITH A RULER TO 32NDS OF AN INCH		
4 CONVERT FRACTIONS AND DECIMALS		
5 SOLVE PROBLEMS IN MATERIAL CONTENT & PRESS SHEET LAYOUTS		
6 USE FORMULAS & CONVERSION TABLES TO CONVERT ENGLISH/METRIC MEASURES		
7 DRAW CIRCLES, AND SOLVE FOR RADIUS, DIAMETER, AND CIRCUMFERENCE		
8 CONSTRUCT AND INTERPRET PIE GRAPHS		
9 SOLVE PROBLEMS CONVERTING MEASUREMENTS EXPRESSED IN INCHES, POINTS, AND PICA		
10 WORK WITH TIME IN MINUTES, FRACTIONS, DECIMALS		
11 USE ESTIMATION/ROUNDING TO SOLVE PROBLEMS		
12 UNDERSTAND THE USES OF STATISTICAL PROCESS CONTROLS (SPC)		
13 DETERMINE RANGES AND MEANS		
14 USE FRACTIONS, DECIMALS, AND PERCENTAGES TO SOLVE PROBLEMS		
15 UNDERSTAND THE CONCEPTS OF RANDOM SAMPLING, VALIDITY, RELIABILITY, AND VARIATION		
16 PLOT DATA ON A GRAPH		
CRITICAL THINKING/PROBLEM SOLVING COMPETENCIES		
1 USE APPROPRIATE TOOLS TO ANALYZE & DEFINE A PROBLEM		
2 USE APPROPRIATE TOOLS TO ORIGINATE SOLUTIONS TO A PROBLEM		
3 USE APPROPRIATE TOOLS TO SELECT A SOLUTION TO A PROBLEM		
4 USE APPROPRIATE TOOLS TO IMPLEMENT A SOLUTION TO A PROBLEM		
5 USE APPROPRIATE TOOLS TO EVALUATE A SOLUTION TO A PROBLEM		
COMMUNICATIONS COMPETENCIES		
1 LISTEN TO COMPREHEND MESSAGE & FOLLOW DIRECTIONS ACCURATELY		
2 VOCALIZE DIRECTIONS EFFECTIVELY TO OTHERS		
3 READ WORKPLACE MATERIALS TO LOCATE INFORMATION		
4 WRITE TO PASS ON PERTINENT INFORMATION		
5 READ AND FOLLOW DIRECTIONS		
6 RECORD INFORMATION ACCURATELY		
7 VERIFY AND CHECK INFORMATION FOR ACCURACY		
8 SUMMARIZE WORKPLACE INFORMATION IN WRITING		
9 RESPOND APPROPRIATELY ORALLY AND/OR IN WRITING TO WORKPLACE SITUATIONS		

PARTICIPANT NAME_____ DATE ENTERED_____

COMPANY_____

EXHIBIT H

CRITICAL SKILLS ANALYSIS

Task:_____

Worker Category:_____ Task Frequency Use_____

Equipment & Materials Required:

Computer_____ Industry Specific Machine_____
Print_____ Drafting Supplies_____
Calculator_____ Paper/Pencil_____
Tools_____ Other_____

Process: _____

_____

_____

_____

_____

_____

_____

_____

_____

Technical Terms: _____

_____

_____

Problem Areas: _____

_____

_____

Safety Considerations: _____

_____

STFT #2
5/16/91

INFORMAL JOB TASK ANALYSIS

Department/Company _____ Date _____

Interviewee _____ Interviewer _____

Job Task	Material	Skills

STFT #1
5/16/91

Skills TODAY for TOMORROW
Jonesville Community College & PIM&SP
A Partnership For The Future.

LITERACY TASK ANALYSIS
WORKER INTERVIEW

1. What books, manuals, forms, charts, etc, do you read in order to do your job?
   - -where can we obtain copies of these materials
   - -we will need both completed and blank forms if possible

2. Of the materials you read on the job, which are the hardest?
   - -how often do you use these materials
   - -how much reading do you actually do on the job

3. What reports, memos, summaries, or other written materials do you write or complete for your job?
   - -where can we obtain copies of these materials

4. What math skills do you use in your job?
   - -measurements?
   - -calculations?
   - -reading charts, making conversions, etc.

5. What special measuring tools do you need to read to do your job?
   - -from rulers to electronic gauges

6. What computer equipment or computerized machines and tools do you use in your job?
   - -what kinds of tasks are performed on this equipment
   - -do you need to refer to the manual to use this equipment

7. If you were training a new person to do your job, what would that person need to know before you could teach him/her the job?

8. What would a new person find most challenging about learning your job?
   - -how would you teach someone about your job

9. In which parts of your job would you like to improve?

10. What skills would you need to learn in order to promoted to a different or better job?

11. Are you currently being trained or are you training someone new to do this job?
    - -what is most difficult about the training
    - -do you expect to be going back to school or training in this or another job
    - -which manuals/exercises are the most difficult

12. How has your job changed since you first started it?
    - -what new skills do you need that you did not need when you started on this job

EXHIBIT I

The Carl Didde WorkPLACE™ Program
Course Specifications

Course Title On-The-Job Math Computations (Available April 1991)

Course Description

This course focuses on the development of math concepts such as ratio and proportion, estimation, measurements, and the basics of the metric system. It is based on an analysis of the math skills needed in the printing industry. The course uses a state-of-the-art approach by teaching math in a communication-rich environment. Most math is used in the workplace in the context of documents (such as job jackets) and conversations (trouble-shooting). Effective transfer of skills from the classroom to the shop floor is achieved during the course because math problems are presented using printing industry documents, material and lingo, and team problem-solving formats.

Overall Course Goal

The course will enable printing industry employees to use math in a small team context, develop their own definitions for math concepts, and apply the math concepts to sets of problems. Those completing the course will be better able to communicate with other employees about workplace problems that require math, will be more able to tackle math-related problems at work, and will be able to perform calculations more accurately.

Learning Objectives

The course is based on several math applications, each of which has its own objectives.

1. Ratios and Proportions:

At the end of the Ratio and Proportion Unit, participants will be able to:

* develop ratios from job jacket data (e.g., use paper weight per thousand to price paper by the pound or hundred weight)
* develop and use formulas for applying a ratio to specific problems
* solve a proportion with an unknown (e.g., use the weight per carton of finished materials to safely load pallets for shipping)

SKILLS TODAY FOR TOMORROW
CRITICAL THINKING & PROBLEM SOLVING

COMPETENCIES

- To use appropriate tools to analyze and define a problem.
- To use appropriate tools to originate solutions.
- To use appropriate tools to select a solution.
- To use appropriate tools to implement a solution.
- To use appropriate tools to evaluate a solution.

SKILLS TODAY FOR TOMORROW
CRITICAL THINKING & PROBLEM SOLVING

COURSE OUTLINE

INTRODUCTION

PMI - Plus, Minus, Interesting

STEP ONE: ANALYZE AND DEFINE (D)

FI & FO- Information-In & Information-Out

SF & CF - Simplification & Clarification

AGO - Aims, Goals & Objectives

FIP - First Important Priorities

STEP TWO: ORIGINATE SOLUTIONS (O)

CAF - Consider All Factors

APC - Alternatives, Possibilities, Choices

STEP THREE: SELECT A SOLUTION (S)

C&S - Consequences & Sequel

OPV - Other People's Views

EBS - Examine Both Sides

ADI - Agreement, Disagreement, Irrelevance

Decisions

STEP FOUR: IMPLEMENT (I)

Planning

Rules

STEP FIVE: EVALUATE (E)

DEFINING THE PROBLEM

90% OF PROBLEM SOLVING
IS SPENT:

solving the wrong problem
stating the problem so it
can't be solved
solving a solution
stating problems too generally
trying to get agreement on the
solution before there is
agreement on the problem

A PROBLEM WELL DEFINED
IS HALF SOLVED

SKILLS TODAY FOR TOMORROW
CRITICAL THINKING & PROBLEM SOLVING

PROJECT 14

The employees in your department have repeatedly complained about a co-worker who has poor personal hygiene. As the supervisor, how would you handle this?

SKILLS TODAY FOR TOMORROW
CRITICAL THINKING & PROBLEM SOLVING

PROJECT 15

You work in the Finishing department. The job jacket does not specify whether or not the current job is to be drilled. You know this customer usually requests drilled books. What do you do?

SKILLS TODAY FOR TOMORROW
CRITICAL THINKING & PROBLEM SOLVING

PROJECT 18

You have just inspected a 20,000 run job. One signature at the back of the book has bleed tabs. Four of the pages were slightly off center so that when they were trimmed the text in the bleed tabs was cut. Should you accept this lower quality or re-run the 20,000 signature job?

Communications Module

INTRODUCTION

Workplace Communications for Printing is a 48-hour course designed for use in skills training in the printing industry. The course includes a separate unit covering interpersonal communication and listening skills (about 10 hours), and four units in which reading and writing skills are taught together (about 34 hours).

Course materials include the following:

1. Original materials and resource sheets for the interpersonal communications unit.
2. A textbook, "Reading for Workplace Success," Park, Olson and Oldham, which will be given to each student.
3. A textbook, "Writing for Workplace Success," McLean and Lyons, which will be available for classroom use.
4. Original, printing-related materials for the reading and writing units.
5. Student binder.

COURSE PREREQUISITES

* Students should be able to read and comprehend printing-related materials.
* Students should be able to communicate in standard English.

COURSE OBJECTIVES

Upon successful completion of this course, the student will be able to:

1. listen attentively in order to comprehend a message and follow directions accurately.
2. vocalize effectively directions to others.
3. read workplace materials to locate information.
4. write to pass on pertinent information.
5. read and follow directions.
6. record information accurately.
7. verify and check information for accuracy.
8. summarize workplace information in writing.
9. respond appropriately orally and/or in writing to work-related situations.

COURSE CONTENT

The interpersonal communications component of this course is organized into one unit of five lessons. Using original materials, the instructor presents exercises to illustrate how to more effectively give and respond to information in the workplace.

The reading and writing components are organized into four units which generally parallel the organization of the textbooks. Many of the activities incorporate both reading and writing skills in the same lesson. We believe that writing effectively is just as essential as reading in the workplace and have attempted not to isolate the two components. However, individual reading and writing skills, such as scanning and subject-verb agreement, are addressed as discrete disciplines.

In addition to being integrated, the reading and writing activities will include printing-related materials as much as possible. The lesson format will generally be as follows:

Reading	Writing
Introduce lesson objectives	Introduce lesson objectives
Introduce reading skill to be practiced	Introduce writing skill
Read, following the model	Practice in small groups
Develop unfamiliar vocabulary from context and discuss	Analyze as a class
Discuss reading objective	Individual skills practice

Homework assignments, in the form of worksheets, may be provided to practice and reinforce the lesson's skills unit. Homework, of course, is always voluntary. For each lesson there is a worksheet covering the writing skill taught in the lesson, and students can also be encouraged to complete the relevant exercises in their reading workbook. The instructor should take a few minutes at the beginning of each class to go over these assignments.

EXHIBIT J

Skills TODAY for TOMORROW
Catonsville Community College & PIM&SP
A Partnership For The Future.

COURSE FOLLOW-UP INVENTORY

NAME_____ DATE_____

COMPANY_____

Please answer the following questions by placing an X over your choice. This information will help us to evaluate the effectiveness of the Skills Today For Tomorrow classes.

1. How well do you communicate with other people at work?

very well	quite well	slightly well	not at all well

2. How well do you read English?

very well	quite well	slightly well	not at all well

3. How well do you write English?

very well	quite well	slightly well	not at all well

4. How well do you speak English?

very well	quite well	slightly well	not at all well

5. How well do you work with numbers?

very well	quite well	slightly well	not at all well

6. Please mark with an X on the list below any changes you have noticed in yourself since taking classes. Feel free to add other changes you may have noticed.

Do you...

____ Read more for pleasure?
____ Read more to your children or grandchildren?
____ Help your children or grandchildren more with their schoolwork?
____ Solve problems better at work?
____ Use math in everyday life more comfortably?
____ Write more?
____ _____
____ _____

Have you...

____ Enrolled in classes through a community college or professional organization?
____ Accepted new responsibilities at work?
____ Been promoted?
____ Received special recognition in the company?
____ Applied for your GED or external diploma?
____ Received your GED or external diploma?
____ _____
____ _____

On the back of this sheet, please tell us more.

EXHIBIT K

Skills TODAY for TOMORROW
Catonsville Community College & PHASE
A Partnership For The Future.

COURSE EVALUATION FORM

PLEASE ANSWER THE FOLLOWING QUESTIONS BY MARKING AN X ON THE BLANKS. IF YOU NEED HELP, ASK THE INSTRUCTOR.

COURSE TITLE_____START DATE_____

INSTRUCTOR_____LOCATION_____

1. Have you reached the goal(s) you set when you started this class?
   ____a. Yes
   ____b. No
   ____c. Somewhat - List the goal(s) you have not yet met.
   _____
   _____

2. What skill(s) do you think this class has helped you to improve? (You may mark more than one.)
   ____a. Reading English
   ____b. Speaking English
   ____c. Writing English
   ____d. Performing arithmetic
   ____e. Self-discipline (regulating yourself for the sake of improvement)
   ____f. Self-motivation (causing yourself to act)
   ____g. None of these skills
   ____h. If you have improved other skills, please list:_____
   _____
   _____

3. In relation to your goal(s), was this class helpful for you?

_____	_____	_____	_____	_____
definitely yes	probably yes	probably not	definitely not	I don't know

4. Do you think that the skills you learned in this class will help you to do your job better?

_____	_____	_____	_____	_____
definitely yes	probably yes	probably not	definitely not	I don't know

5. Was the instructor well-informed about the material presented in class?

_____	_____	_____	_____	_____
definitely yes	probably yes	probably not	definitely not	I don't know

6. Was the instructor(s) helpful to you?

definitely yes	probably yes	probably not	definitely not	I don't know

7. Was the instructor sensitive to students?

definitely yes	probably yes	probably not	definitely not	I don't know

8. Were the methods of teaching helpful to you?

definitely yes	probably yes	probably not	definitely not	I don't know

9. Would you recommend this class to a co-worker or friend?

definitely yes	probably yes	probably not	definitely not	I don't know

10. As a result of taking this class, would you take another adult education class if it were offered <u>at this location</u>?

definitely yes	probably yes	probably not	definitely not	I don't know

11. As a result of taking this class, would you take another adult education class if it were offered <u>at a different location</u>?

definitely yes	probably yes	probably not	definitely not	I don't know

12. Having taken this class, do you intend to take other classes?

definitely yes	probably yes	probably not	definitely not	I don't know

13. If you think that you might take other classes, what type of classes do you intend to take? (If you do not intend to take additional classes, leave this question blank.)

____a. Other Skills Today for Tomorrow Classes

____b. GED classes to earn high school diploma

____c. Credit college classes

____d. Non-credit college classes

____e. Technical training classes (printing)

____f. Adult Basic Education classes

____g. I don't know

____h. Other - Please list_____

_____

14. What was MOST valuable to you in this class?_____

_____

15. What was LEAST valuable to you in this class?_____

_____

ould you recommend to improve this class?_____

_____

_____

17. Please write any comments you have about this class on the back of this sheet. Thank you very much.

EXHIBIT L

Skills Today for Tomorrow
Supervisor Survey

Note: Please **darken** or place a **check mark** ✓ in the appropriate box or record your **written response** as indicated.

Site Location
① Oles Envelope Corporation
② The Oscar T. Smith Company
③ McGregor Printing Corporation
④ Automated Graphic Systems
⑤ York Graphic Services
⑥ Dick Wildes Printing
⑦ Garamond

Supervisor's Name: _____

Participant's Name: _____

Instructions: For the above-named employee you supervise who participated in the Skills Today for Tomorrow work-based education conducted by Catonsville Community College, please indicate whether you *Strongly Agree, Somewhat Agree,* are *Neutral, Somewhat Disagree, or Strongly Disagree* with each of the following statements. Responses will be aggregated to ensure confidentiality. The results of this document should not be used as part of the employee's performance evaluation. Thanks for your cooperation.

After participating in the program . . .	*Strongly Agree*	*Somewhat Agree*	*Neutral*	*Somewhat Disagree*	*Strongly Disagree*
1. The employee is better able to read and understand complex written instructions.	❑	❑	❑	❑	❑
2. The employee can write messages to the supervisor and co-workers.	❑	❑	❑	❑	❑
3. The employee is better able to accept increased responsibilities.	❑	❑	❑	❑	❑
4. The employee is absent less frequently.	❑	❑	❑	❑	❑
5. The employee's capacity to learn tasks has improved.	❑	❑	❑	❑	❑
6. I don't have to repeat instructions to the employee as much as I used to.	❑	❑	❑	❑	❑
7. The employee's desire to learn more about the company has increased.	❑	❑	❑	❑	❑
8. I worry less about the employee getting hurt than I did before the program.	❑	❑	❑	❑	❑
9. I don't need to spend as much time helping the employee with simple calculations and reading instructions.	❑	❑	❑	❑	❑
10. The employee seems more confident in what he/she is doing.	❑	❑	❑	❑	❑

Please record any special comments regarding the employee:

_____

_____

_____

Evaluation

Skills Today for Tomorrow
Advancing a Workplace Literacy Consortium for the Printing Industry

Submitted To:

Catonsville Community College
800 South Rolling Road
Catonsville, MD 21228

Prepared By:

R.G. Wasdyke & Associates
15 Herndon Ave.,
Annapolis, MD 21403

April, 1995

A. Introduction

CCC was awarded a grant under the National Workplace Literacy Grant Program to expand its model program and curriculum in other regions of Maryland and Southern Pennsylvania in 1993. The 18 month project continued to address the workplace literacy needs in the printing industry through two components. The *first component* focused on offering instruction at Baltimore area printing companies not previously involved in the basic skills programs. Curriculum was further refined, and a videotape highlighting the program and the literacy problem in the printing industry was developed as a recruitment and promotional tool.

The *second component* focused on expanding the program model and curriculum to the printing industry outside of Baltimore. Partnerships between community colleges and were formed. CCC worked with community colleges to help them establish workplace literacy programs at printing companies in their service areas. The objective of this component is to make **Skills Today for Tomorrow** accessible to printing companies through Maryland and southern Pennsylvania.

B. Purpose

The purpose of this evaluation was to conduct both a process and outcome evaluation of the **Skills Today for Tomorrow** program funded under the National Workplace Literacy Grant Program in 1993. The intent of the process evaluation was to assess whether or not

© Wasdyke Associates, 1995

the program was implemented and operated as stated in its goals and objectives. A process evaluation was completed, and the program is operating well; however, the results are not reported herein. The questions addressed in this evaluation report focus on the program's short-term objectives of increasing participants' literacy competency levels and post-program educational plans and job status.

C. Methodology

Design. A quasi-experimental design was used in the evaluation of the **Skills Today for Tomorrow** program . Quasi-experimental designs are used when wholly random assignments are not possible. Because participants in the program were volunteers, this design was the most appropriate. Pretests-posttesets were used with single groups of individuals, and the mean differences were tested for significance between groups.

Sample. The data evaluated in this reported is based on a total sample size of 114 program participants. The table below displays the number of participants by the different companies involved in the project.

Table 1. Printing Companies Participating in the Project

Company	N
Advantage Printing	19
Automated Graphic Services	9
Catterton Printing	5
Garamond	7
McGregor Printing Corporation	31
Oles Envelope Corporation	29
The Oscar T. Smith Company	9
York Graphic Services	5
Total	114

Instruments. The CASAS instrument was used to assess gains in reading and mathematics. In addition, program participants were also assessed by teachers in the following competency areas: reading, mathematics, and writing. Participants completed a **Participants Data Form** that was used to gather the following type of data: (a) demographic characteristics, work history, and educational experience; (b) reasons for entering the program; and (c) willingness of participants to perform basic literacy tasks. Information regarding the participants' plans for further education and job status following the program was also collected. A Supervisor's Rating Form was also created to determine supervisors' opinions about changes in participants behavior as the result of involvement in the program.

Data Collection. Data were collected from individuals involved in this evaluation using the measures discussed as both pretests and posttests, Participant Data Form and Supervisor's Rating Form. CCC staff were responsible for all data collection.

Data Analysis. Several statistical tests were conducted for the present evaluation. Simple means and percentages were calculated for the demographic, work history and educational experience data as well as other rating scale data; e.g., supervisors' ratings. For the pretest-posttest data, the *t* test procedure for matched samples was used to compare the means between groups for gains in basic reading, math and writing literacy.

D. Background Characteristics

Table 2 below displays the background characteristics of participants. These data show:

- 71 percent of the participants were white, 29 percent African-American.
- The typical participant was 37 years of age.
- 82 percent of the participants were male, 18 percent were female.
- 53 percent had obtained a high school diploma, 25 percent of the participants had not completed more than 11 years of schooling, 17 percent had some college, but no degree, and 5 percent attended trade school.

Participant's work history is shown in Table 3 below. These data show that participants have considerable work experience as indicated below:

- 92 percent of the participants has worked 10 years or more, however only 43 percent have worked in the printing industry for 10 years or greater.
- 24 percent of the participants have worked for the current employer (printing industry) for 10 years or more.

Table 2. Characteristics of Participants
(n=114)

Characteristics	%
Ethnicity	
White	71%
African-American	29%
Age	
Average Age	37
Gender	
Male	82%
Female	18%
Highest Level of Education Completed	
<8 years	8%
9 to 11 years	17%
H.S. Graduate	53%
GED Diploma	0%
Trade School	5%
Some college, no degree	17%

Table 3. Work and Related History of Participants
(n=114)

	Work Experience	Experience in the Printing Industry	Employment with Current Employer
<one year	0%	13%	22%
one to two years	2%	20%	24%
two to five years	6%	25%	30%
five to ten years	20%	0%	0%
ten to fifteen years	22%	11%	9%
over fifteen years	70%	32%	15%

E. Reasons for Entering the Program

Table 4 provides a breakdown of the reasons for the entering the program that participants cited. Improved job performance was reported by 92 percent of the participants as the reasons for entering the program. Basic writing, reading, and number skills were reported by about 75 percent as the reason for entering.

Table 4. Reasons for Entering the Program
(n=114)

Reason	%
To do better on my job	92%
To learn to write better	79%
To learn to read better	76%
To learn to work with numbers better	75%
To learn to speak English better	71%
To get ready for other classes or training	71%
To make more money	70%
To be able to help my children with their school work	69%
To get promoted	67%
To get ready for a different job	64%

As a way of determining what literacy skills the participants were able to perform, the participants were asked to rate how willing they were to do 9 basic tasks. Table 5 graphically presents the distribution of participant ratings. In general, the finding of this analysis indicates that participants reported being confident in performing simple tasks (e.g., add or subtract a column of numbers, compare prices from a newspaper ad, etc.). However, only 37 percent of the participants were willing to write a note to the boss, 44 percent compute with fractions and decimals, 54 percent read newspapers or magazines, and 60 percent divide the cost of a shared purchase. These findings suggest that program participants were most in need of writing and basic mathematics computational skills involving fractions and decimals.

F. CASAS Pretest and Posttest Results

There were statistically significant gains in literacy by program participants after instruction as exhibited in Table 6. The mean scale score on CASAS for math was 216.24 on the pretest and 228.9 on the posttest (p=.001). Likewise, the mean scale score for reading increased from 221.2 on the pretest to 228.6 on the posttest (p=.005). However, it must be noted that these results are preliminary since they were produced from matched samples of 15 participants on the math test and 16 on the reading test.

Table 5 Participants Willingness to do Simple Tasks

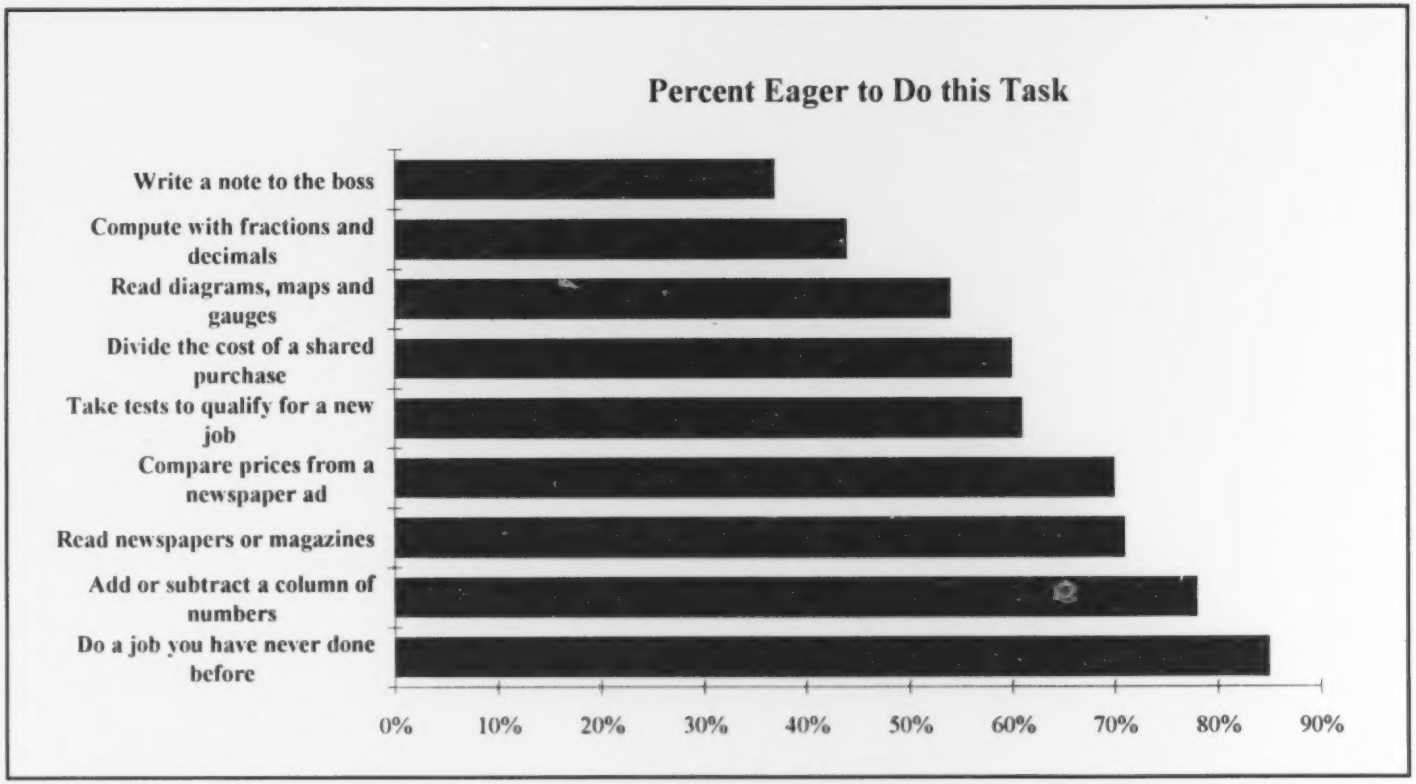


Table 6. Literacy Gains for Program Participants using Pre-and Post-CASAS Scores

	N	Mean Scale Score	t Value	Probability (two-tailed)
Pre-Math Total	15	216.24		
Post-Math Total	15	228.91		
			-3.865	0.001
Pre-Read Total	16	221.21		
Post-Read Total	16	228.61	-3.174	0.001

Table 7. Literacy Gains for Program Participants using Pre-and Post-Number of Competencies Mastered

	N	Mean Competencies	t Value	Probability (two-tailed)
Pre-Read Total	24	2.04		
Post-Read Total	24	6.46		
			-6.159	0.001
Pre-Math Total	26	2.04		
Post-Math Total	26	8.08	-8.789	>.001
Pre-Write Total	14	2.29		
Post-Write Total	14	4.35	-3.867	0.001

G. Competencies Mastered

Program participants also demonstrated statistically significant number of competencies mastered as determined by analysis of program records completed by instructors as exhibited in Table 7. Participants mastered significantly greater number of reading (p=.001), mathematics (p>.001), and writing (p=.001) competencies. However the paucity of data prevents generalizing the data beyond the group evaluated.

H. Future Plans

Table 8 shows the findings from the evaluation that assessed the impact of the program on the educational plans and job status of program participants. The data below strongly

suggest that the program had a substantial effect on the educational plans of participants. Slightly more than half (55%) of the participants plan to enroll in further education related to the printing industry and 16 percent plan to enroll in non-print related education. In total, 71 percent of the participants plan to enroll in some type of further education.

However, it is somewhat disappointing that only nine percent of program participants who completed the program will earn additional compensation and/or higher level job responsibility. These results indicate that improvement in participants literacy skills had a positive impact on their educational aspiration but little on immediate earnings capacity or increased job responsibility.

Table 8. Future Educational Plans and Employment Status

Which of the following best describes the participant's plans for further education? (n=56)	**%**
Enroll in further education related to the printing industry.	55%
Enroll in further education not related to the printing industry.	16%
No plans for further education.	29%
Which of the following best describes the participant's status concerning job advancement and/or compensation as the result of training? (n=51)	
Additional and/or higher level job responsibilities	6%
Additional compensation.	3%
No change in job or compensation.	90%

I. Supervisors' Ratings

The last findings to be reported from this evaluation assessed supervisors' ratings of program participants. Supervisors were asked to state whether they strongly agreed, somewhat agreed, were neutral, somewhat disagreed, or strongly disagreed with statements found in Table 9. Analysis of these findings suggest that the program had a positive impact on non-cognitive factors such as participants confidence level, ability to accept responsibilities and desire to learn as reported by over 70 percent of the supervisors. Nonetheless, only 47 percent of the supervisors reported that participants were better able to read, understand and write messages. Generalizing these findings beyond the group evaluated is restricted due to the small number of ratings analyzed.

Table 9. Supervisor's Ratings
(n=17)

Supervisors who Strongly Agree or Somewhat Agree with the following statements	%
The employees seems more confident.	88%
The employee is better able to accept responsibilities.	71%
The employee's desire to learn more has increased.	71%
The employee is absent less frequently.	53%
The employee's capacity to learn complex tasks has improved.	53%
I don't have to repeat instructions.	53%
The employee is better able to read and understand.	47%
The employee can write messages.	47%
I don't need to spend as much time helping the employee.	47%
I worry less about the employee getting hurt.	41%

J. Conclusions

Participants in this evaluation appear to be making statistically significance gains in literacy skills in reading, math and writing during the program. Seventy-one percent (71%) of the participants have plans to continue their education upon completion of the program. The evaluation also indicated, however, that the program had little positive impact on program completers immediate earnings and increased job responsibility. Supervisors felt that the program contributed to participants increased confidence level, desire to learn, and ability to accept responsibility. Due to the relatively few number of cases available for many of the statistical analyses the findings and conclusions in this report should be viewed as tentative and preliminary.